

UNITED STATES AIR FORCE

OCCUPATIONAL SURVEY REPORT

19990521 158

SURGICAL SERVICES

AFSC 4N1X1B/C/D

OSSN 2331

MARCH 1999

**OCCUPATIONAL ANALYSIS PROGRAM
AIR FORCE OCCUPATIONAL MEASUREMENT SQUADRON
AIR EDUCATION AND TRAINING COMMAND
1550 5TH STREET EAST
RANDOLPH AFB, TEXAS 78150-4449**

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	<u>OSR</u>	<u>ANL</u> <u>EXT</u>	<u>TNG</u> <u>EXT</u>	<u>JOB</u> <u>INV</u>
AFOMS/OMDQ	1			
AFOMS/OMYXL	10		5	10
AL/HRMM	2			
AL/HRTE	1		1	
ARMY OCCUPATIONAL SURVEY BRANCH	1			
CCAF/AYX	1			
DEFENSE TECHNICAL INFORMATION CENTER	2			
HQ ACC/DPPEE	3		3	
HQ AETC/DPSE	1		1	
HQ AETC/SGAT	2		1	
HQ AFMC/DPE	3		3	
HQ AFPC/DPAAD2	1			
HQ AFPC/DPPAC	1			
HQ AFSPC/DPAE	3		3	
HQ AMC/DPPET	1			
HQ PACAF/DPPET	3		3	
HQ USAFE/DPATTJ	3		3	
HQ USMC/STANDARDS BRANCH	1			
NAVMAC	1			
59 MW/NS (2200 BERGQUIST DRIVE, STE 1, LACKLAND AFB TX 78236-5300)	1		1	
383 TRS/TRR (939 MISSILE ROAD, STE 3, SHEPPARD AFB TX 76311- 2262)	7	1	4	3
882 TRG/TGEQT (939 MISSILE ROAD, STE 1, SHEPPARD AFB TX 76311-2245)	1		1	

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PREFACE

This report presents the results of an Air Force Occupational Survey of the Surgical Services career ladder, Air Force Specialty Code (AFSC) 4N1X1B/C/D. Authority for conducting occupational surveys is contained in AFI 36-2623. Copies of this report and pertinent computer printouts are distributed to the Air Force Functional Manager, the technical training location, all major using commands, and other interested operations and training officials.

The survey instrument was developed by First Lieutenant Christopher D. Gilliam, Inventory Development Specialist, with computer programming support furnished by Mrs. Jeanie C. Guesman and administrative support provided by Mr. Richard G. Ramos. First Lieutenant Diedre N. Presley, Occupational Analyst, analyzed the data and wrote the final report. This report has been reviewed and approved by Lieutenant Colonel Roger W. Barnes, Chief, Airman Analysis Section, Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS).

Additional copies of this report can be obtained by writing to AFOMS/OMYXI, 1150 5th Street East, Randolph AFB Texas 78150-4449, or by calling DSN 487-5543. For information on the Air Force occupational survey process or other on-going projects, visit our web site at <http://www.omsq.af.mil>.

GEORGE KAILIWAI III, Lt Col, USAF
Commander
Air Force Occupational Measurement Squadron

JOSEPH S. TARTELL
Chief, Occupational Analysis Flight
Air Force Occupational Measurement Squadron

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SUMMARY OF RESULTS

1. **Survey Coverage:** The Surgical Services career ladder was surveyed to obtain current task and equipment data for use in evaluating current training programs. Survey results are based on responses from 764 respondents (69 percent of total number surveyed). The survey sample satisfactorily represents the overall career ladder population.
2. **Specialty Jobs:** One cluster and eight independent jobs were identified in the career ladder analysis. The eight independent jobs identified were: Central Sterile Supply (CSS) Technician, Otorhinolaryngology (ENT) Technician, Urology Technician, Orthopedic Technician, Clinic NCOIC, Surgical Logistics, Supervisory and Management, and Superintendent. The three jobs comprising the Surgical Services Cluster were: Entry-Level Operating Room (OR) Technician, OR Technician, and Phase II Instructors.
3. **Career Ladder Progression:** Skill-level progression for members of this AFSC is typical of most career ladders. Personnel at the 3- and 5-skill levels perform many tasks in common and both groups spend the vast majority of their relative job time performing general clinical activities, sterile operating room activities, performing central sterile supply activities, and nonsterile intraoperative operating room activities. Seven-skill level members still perform a substantial amount of routine day-to-day technical tasks, but a shift toward supervisory and management functions is evident. Personnel at the 9-skill level spend the majority of their job time performing administrative and management activities.
4. **Training Analysis:** A comprehensive review of the Specialty Training Standard (STS) found that most paragraphs were supported by the survey data. However, those STS paragraphs covering urology, orthopedics, and otorhinolaryngology activities had several unsupported tasks. The analysis also revealed numerous tasks not referenced to the STS. Analysis of the 4N1X1B/C/D Plan of Instruction (POI) revealed that several paragraphs are not supported by survey data. These areas should be reviewed to determine any modifications required to improve the effectiveness or efficiency of training.
5. **Job Satisfaction Analysis:** In general, job satisfaction among AFSC 4N1X1B/C/D personnel is high. When compared to other Medical AFSCs surveyed in 1997, AFSC 4N1X1B/C/D members in the 1-48 months, 49-96 months, and 97+ months total active federal military service groups (TAFMS) indicated similar responses. Data show AFSC 4N1X1B/C/D personnel satisfaction indicators are comparable with their counterparts in other medical AFSCs. Overall, respondents within the various job groups find their work interesting and feel their talents and training are well used.

6. **Implications**: Survey results indicate the present classification structure is supported by survey data. The STS and POI document should be thoroughly examined to determine if areas should be retained or deleted in the next Career Field Education and Training Plan (CFETP). The tasks with high percentages of members performing should be examined for inclusion into the CFETP document. Responses by sample personnel reflect positive feelings toward their jobs and training.

**OCCUPATIONAL SURVEY REPORT (OSR)
SURGICAL SERVICES
(AFSC 4N1X1B/C/D)**

INTRODUCTION

This is a report of an occupational survey of the Surgical Services career ladder, AFSC 4N1X1B/C/D, conducted by the Occupational Analysis Flight, Air Force Occupational Measurement Squadron (AFOMS). The "B" shredout personnel operate special urological radiography equipment, administer injections, catheterize patients, perform laboratory tests and procedures, and administer intravesical medications; the "C" apply and remove casts and splints as directed by health care providers; and the "D" shred personnel perform minor diagnostic and therapeutic ear, nose, and throat (ENT) procedures. This survey data will ensure current data for use in evaluating the effectiveness of training within the career ladder and technical training materials. The last OSR was published in March 1995.

Background

As described in the AFMAN 36-2108 *Airman Classification*, dated 31 October 1998, Surgical Services personnel at the 3- and 5-skill level participate in, manage, and evaluate surgical patient care activities and related training programs. They also organize the medical environment, perform and direct support activities in patient care situations, including contingency operations and disasters, assist professional staff in providing patient care for the surgical patient before, during, and after surgery, and perform scrub and circulating duties in the operating room (OR). Additionally, 3- and 5-skill level personnel participate in planning, implementing, and evaluating management activities related to the OR and Central Sterile Supply Services (CSSS).

In addition to the above tasks, personnel at the 7-skill level perform management and training functions within the surgical service, plan and schedule workloads and duty assignments, and establishes work methods and standards. They also analyze requirements and supervise requisition, storage, maintenance, and issue of equipment and supplies. Seven-skill level personnel also inspect and evaluate activities and procedures to ensure maintenance of asepsis and proper environmental, equipment, and facility safety conditions.

Initial 3-skill level training for AFSC 4N1X1B/C/D personnel is currently provided through course J3AQR4N131-002, Surgical Service Apprentice Course (Phase I) taught at Sheppard AFB TX. This course is 8-weeks, 1 day in length and provides the airman with knowledge and skills necessary to perform sterile and non-sterile functions in the operating room when assisting the surgeon as scrub specialists or assisting the nurse in performing circulating duties. Upon

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completion of Phase I, students proceed to course J5ABO4N131-002, Surgical Services Apprentice Course (Phase II), in order to receive 3-skill level. This 6-week clinical course is taught at the following locations: Offutt AFB, Travis AFB, Scott AFB, Kirtland AFB, Keesler AFB, Andrews AFB, and Wright-Patterson AFB.

Entry into AFSC 4N1X1B/C/D requires a General Armed Forces Vocational Aptitude Battery score of General 53 and a Strength and Stamina requirement of "G" (weight lift of 40lbs).

SURVEY METHODOLOGY

Inventory Development

The data collection instrument for this occupational survey was USAF Job Inventory (JI) OSSN 2331, dated March 1998. A tentative task list was prepared after reviewing pertinent career ladder publications and directives, pertinent tasks from the previous survey instrument, and data from the last OSR. The preliminary task list was refined and validated through personal interviews with 29 subject-matter experts (SMEs) at the technical training location and at the following operational bases:

<u>BASE</u>	<u>UNIT VISITED</u>
Sheppard AFB TX	383 TRS/XUEA
Lackland AFB TX	59 MW/NS
Kirtland AFB NM	377 MDOS/SGOS
Travis AFB CA	60 MDOS/SGCS
Maxwell AFB AL	42 MDOS/SGOS

The resulting JI contains a comprehensive listing of 461 tasks grouped under 16 duty headings and a background section requesting such information as grade, duty title, organizational level, medical facility assigned, work schedule, national certification held, and special tools or equipment operated.

Survey Administration

From May through September 1998, Base Training Offices administered the inventory to 1,100 eligible Active Duty AFSC 4N1X1B/C/D personnel. To qualify for the survey, personnel were required to hold a duty AFSC of 4N1X1B/C/D. Excluded from the survey were the following (1) hospitalized personnel; (2) personnel in transition for a permanent change of station (PCS); (3) students; (4) personnel retiring within the time the inventories were administered to the field; and (5) personnel with less than 6 weeks on the job. Job incumbents were selected from a computer-generated mailing list obtained from personnel data tapes maintained by the Air Force Personnel Center, Randolph AFB TX.

Each individual who completed the inventory first completed an identification and biographical information section and then checked each task performed in his or her current job. After checking all tasks performed, each member then rated each of these tasks on a 9-point scale, showing relative time spent on that task, as compared to all other tasks checked. The ratings ranged from 1 (very small amount time spent) through 5 (about average time spent) to 9 (very large amount time spent).

To determine relative time spent for each task checked by a respondent, all of the incumbent's ratings are assumed to account for 100 percent of his or her time spent on the job and are summed. Each task rating is then divided by the total task ratings and multiplied by 100 to provide a relative percentage of time spent for each task. This procedure provides a basis for comparing tasks in terms of both percent members performing and average percent time spent.

Survey Sample

Personnel were selected to participate in this survey so as to ensure an accurate representation across major commands (MAJCOM) and paygrade groups. All eligible AFSC 4N1X1B/C/D personnel were mailed survey booklets. Table 1 reflects the percentage of assigned AFSC 4N1X1B/C/D personnel as of May 1998. The 764 respondents in the final sample represent 64 percent of the total assigned personnel. Table 2 reflects the paygrade and MAJCOM distribution for AFSC 4N1X1B/C/D personnel.

Task Factor Administration

Job descriptions alone do not provide sufficient data for making decisions about career ladder documents or training programs. Task factor information is needed for a complete analysis of the career ladder. While most participants in the survey process completed an USAF JI, selected senior AFSC 4N1X1B/C/D personnel were also asked to complete booklets rendering judgments on task training emphasis (TE) or task difficulty (TD). The TE and TD booklets were processed separately from the JIs. The information gained from these task factor data is used in various analyses and is a valuable part of the training decision process.

Training Emphasis (TE). TE is a rating of the amount of emphasis that should be placed on tasks in entry-level training. The 41 senior AFSC noncommissioned officers (NCOs) who completed a TE booklet were asked to select tasks they felt required some sort of structured training for entry-level personnel and then indicate how much training emphasis these tasks should receive, from 1 (extremely low emphasis) to 9 (extremely high emphasis). Structured training is defined as training provided at resident technical schools, field training detachments, mobile training teams, formal on-the-job-training (OJT), or any other organized training method. The interrater reliability was excellent, indicating very strong agreement among the 27 raters as to which tasks required some form of structured training and which did not. The average TE rating was 3.13, with a standard deviation of 2.24. Any task with a TE rating of 5.37 or above is considered to have high TE.

Task Difficulty (TD). TD is an estimate of the amount of time needed to learn how to do each task satisfactorily. The 37 senior NCOs who completed TD booklets were asked to rate the difficulty of each task using a 9-point scale (extremely low to extremely high). Interrater reliability was acceptable, with high agreement. Ratings were standardized, so tasks have an average difficulty of 5.00 and a standard deviation of 1.00. Any task with a TD rating of 6.00 or above is considered to be difficult to learn.

When used in conjunction with the primary criterion of percent members performing, TE and TD ratings can provide insight into first-enlistment personnel training requirements. Such insights may suggest a need for lengthening or shortening portions of instruction supporting entry-level jobs.

SPECIALTY JOBS (Career Ladder Structure)

The occupational analysis process begins with an examination of the career ladder structure. The structure of jobs within the Surgical Services career ladder was examined based on similarity of tasks performed and the relative percent of time spent ratings provided by job incumbents, independent of other specialty background factors.

The first step in the analysis process is to identify the structure of the career ladder in terms of the jobs performed by the respondents. The Comprehensive Occupational Data Analysis Program (CODAP) creates an individual job description for each respondent based on the tasks performed and relative amount of time spent on the tasks. The CODAP automated job clustering program then compares all the individual job descriptions, locates the two descriptions with the most similar tasks and time spent ratings, and then combines them to form a composite job description. In successive stages, new members are added to the initial group or new groups are formed based on the similarity of tasks performed and time spent rating.

TABLE 1

DAFSC DISTRIBUTION OF SURVEYED PERSONNEL

DAFSC	PERCENT OF ASSIGNED	PERCENT OF SAMPLE
4N1X1	80	81
4N1X1B	4	4
4N1X1C	11	10
4N1X1D	5	5

TOTAL ASSIGNED* = 1,202

TOTAL SURVEYED = 1,100

TOTAL IN SURVEY SAMPLE = 764

PERCENT OF ASSIGNED IN SAMPLE = 64%

PERCENT OF SURVEYED IN SAMPLE = 69%

* Assigned strength as of May 1998

TABLE 2

PAYGRADE / COMMAND DISTRIBUTION OF TOTAL SURVEY SAMPLE

PAYGRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
E-1 - E-3	29	30
E-4	30	28
E-5	23	25
E-6	10	10
E-7	7	7
E-8	-	0
COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
AETC	25	26
AMC	21	25
ACC	20	20
AFMC	17	12
USAFE	7	7
PACAF	5	6
AFSPC	2	2
USAFA	2	2
ELM	-	0

* Assigned strength as of May 1998

-Less than 1 percent

TABLE 2 (CONTINUED)

PAYGRADE / COMMAND DISTRIBUTION OF 4N1X1 SAMPLE

PAYGRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
E-1 - E-3	37	36
E-4	27	27
E-5	20	20
E-6	9	9
E-7	6	8
E-8	-	0
COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
AETC	25	24
AMC	20	20
ACC	20	20
AFMC	17	11
USAFE	7	7
PACAF	5	5
AFSPC	2	3
USAFA	3	9
ELM	-	-

* Assigned strength as of May 1998

-Less than 1 percent

TABLE 2 (CONTINUED)

PAYGRADE / COMMAND DISTRIBUTION OF 4N1X1B SAMPLE

PAYGRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
E-1 - E-3	0	0
E-4	19	15
E-5	50	64
E-6	15	7
E-7	16	14
E-8	0	0
COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
AETC	31	29
AMC	24	31
ACC	17	25
AFMC	10	4
USAFE	10	4
PACAF	4	7
AFSPC	0	0
USAFA	4	0
ELM	0	0

* Assigned strength as of May 1998

TABLE 2 (CONTINUED)

PAYGRADE / COMMAND DISTRIBUTION OF 4N1X1C SAMPLE

PAYGRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
E-1 - E-3	2	1
E-4	42	38
E-5	33	37
E-6	14	15
E-7	9	9
E-8	0	0
COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
AETC	20	24
AMC	18	18
ACC	20	19
AFMC	20	14
USAFE	8	8
PACAF	9	10
AFSPC	2	2
USAFA	3	5
ELM	0	0

* Assigned strength as of May 1998

TABLE 2 (CONTINUED)

PAYGRADE / COMMAND DISTRIBUTION OF 4N1X1D SAMPLE

PAYGRADE	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
E-1 - E-3	2	0
E-4	46	34
E-5	33	40
E-6	14	23
E-7	5	3
E-8	0	0
COMMAND	PERCENT OF ASSIGNED*	PERCENT OF SAMPLE
AETC	22	28
AMC	28	28
ACC	15	14
AFMC	15	9
USAFE	9	9
PACAF	6	6
AFSPC	0	0
USAFA	5	6
ELM	0	0

* Assigned strength as of May 1998

The basic group used in the hierarchical clustering process is the *Job*. When two or more jobs have a substantial degree of similarity in tasks performed and time spent on tasks, they are grouped together and identified as a *Cluster*. The structure of the career ladder is then defined in terms of jobs and clusters of jobs. The resulting job structure information can be used to evaluate the accuracy of career ladder documents (i.e., AFMAN 36-2108 *Airman Classification*, the Career Field Education and Training Plan, and Specialty Training Standard (STS)) and to gain a better understanding of current utilization patterns.

Overview of Specialty Jobs

Based on the analysis of tasks performed and the amount of time spent performing each task, one cluster and eight jobs were identified within the AFSC 4N1X1B/C/D survey sample. Figure 1 illustrates the jobs performed by all AFSC 4N1X1B/C/D personnel. Figures 2 through 5 illustrate the jobs performed by 4N1X1 "B," "C," and "D" shred personnel respectively. A listing of those jobs is provided below. The stage (ST) number shown beside each title is a reference to computer-printed information; the letter "N" represents the number of personnel in each group.

- I. SURGICAL SERVICES CLUSTER (ST043, N=478)
 - A. Entry-Level Operating Room (OR) Technician Job (ST046, N=34)
 - B. Operating Room (OR) Technician Job (ST048, N=434)
 - C. Phase II Training Instructor Job (ST056, N=9)
- II. CENTRAL STERILE SUPPLY (CSS) TECHNICIAN JOB (ST069, N=12)
- III. OTORHINOLARYNGOLOGY (ENT) TECHNICIAN JOB (ST128, N=20)
- IV. UROLOGY TECHNICIAN JOB (ST102, N=25)
- V. ORTHOPEDIC TECHNICIAN JOB (ST066, N=17)
- VI. CLINIC NCOIC JOB (ST087, N=74)
- VII. SURGICAL LOGISTICS JOB (ST068, N=14)
- VIII. SUPERVISORY AND MANAGEMENT JOB (ST052, N=61)
- IX. SUPERINTENDENT JOB (ST033, N=5)

4N1X1 B/C/D CAREER LADDER JOBS

(N = 764)

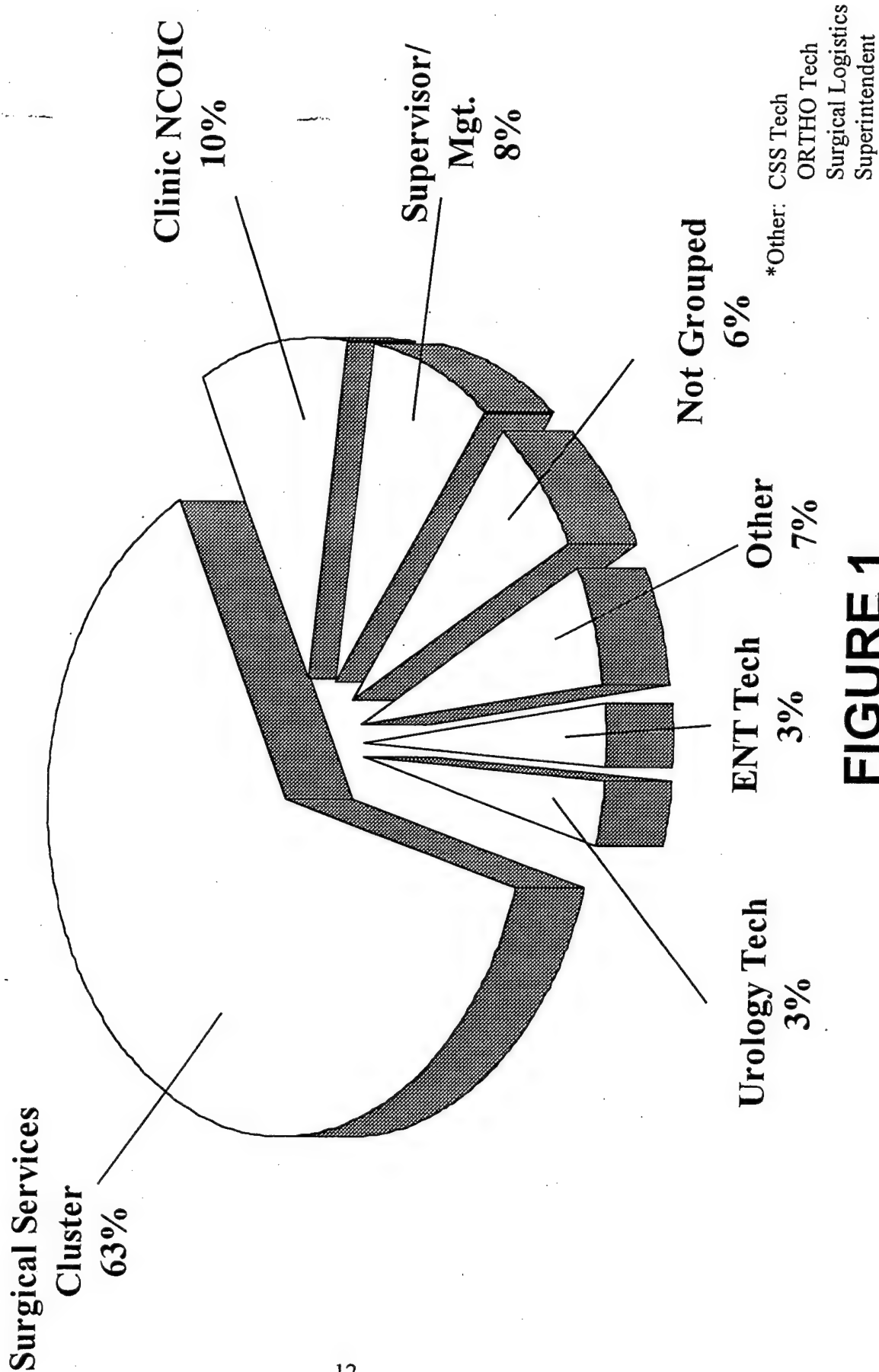


FIGURE 1

4N1X1 CAREER LADDER JOBS (N = 623)

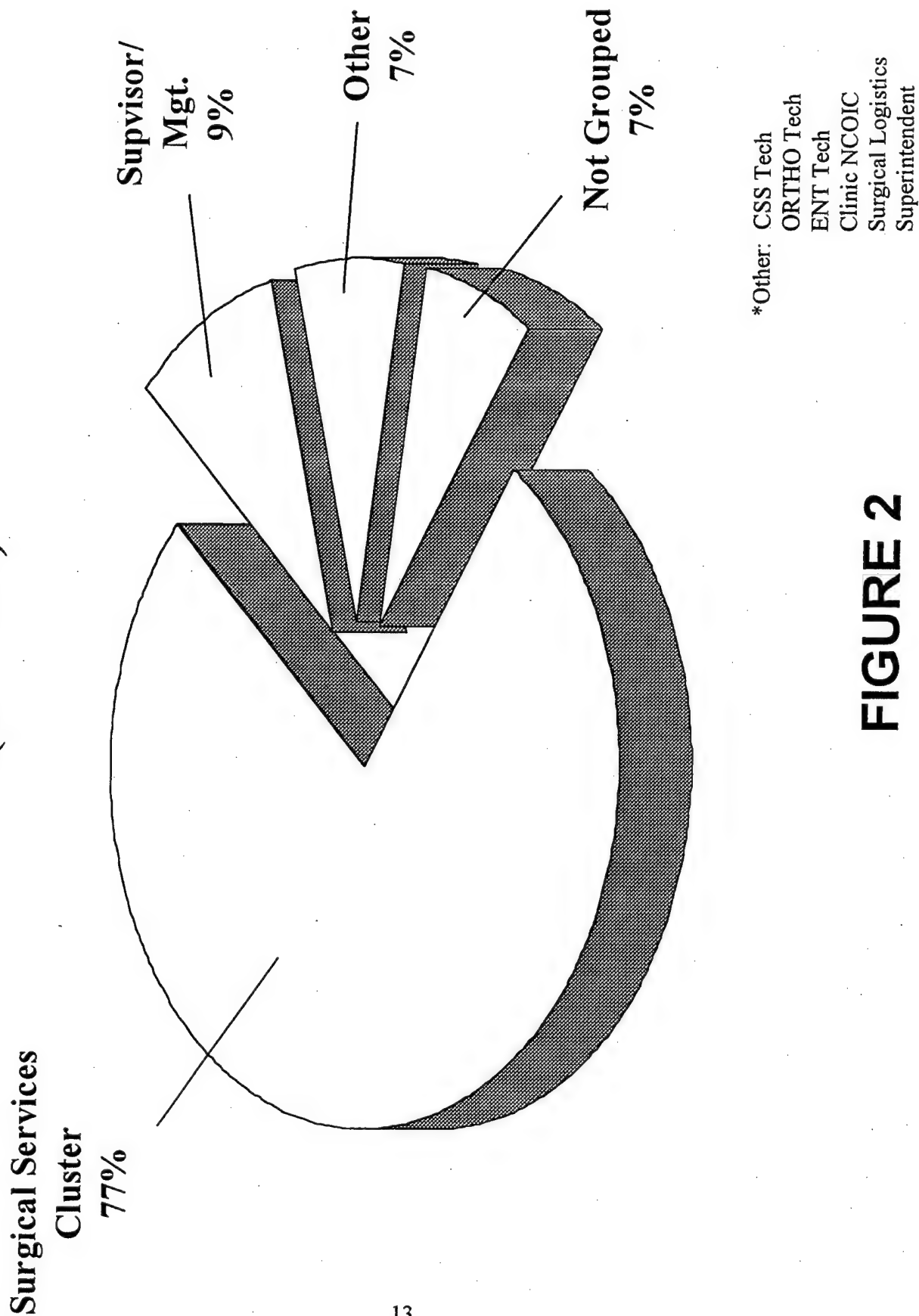


FIGURE 2

4N1X1B CAREER LADDER JOBS

(N = 28)

Urology
Tech
89%

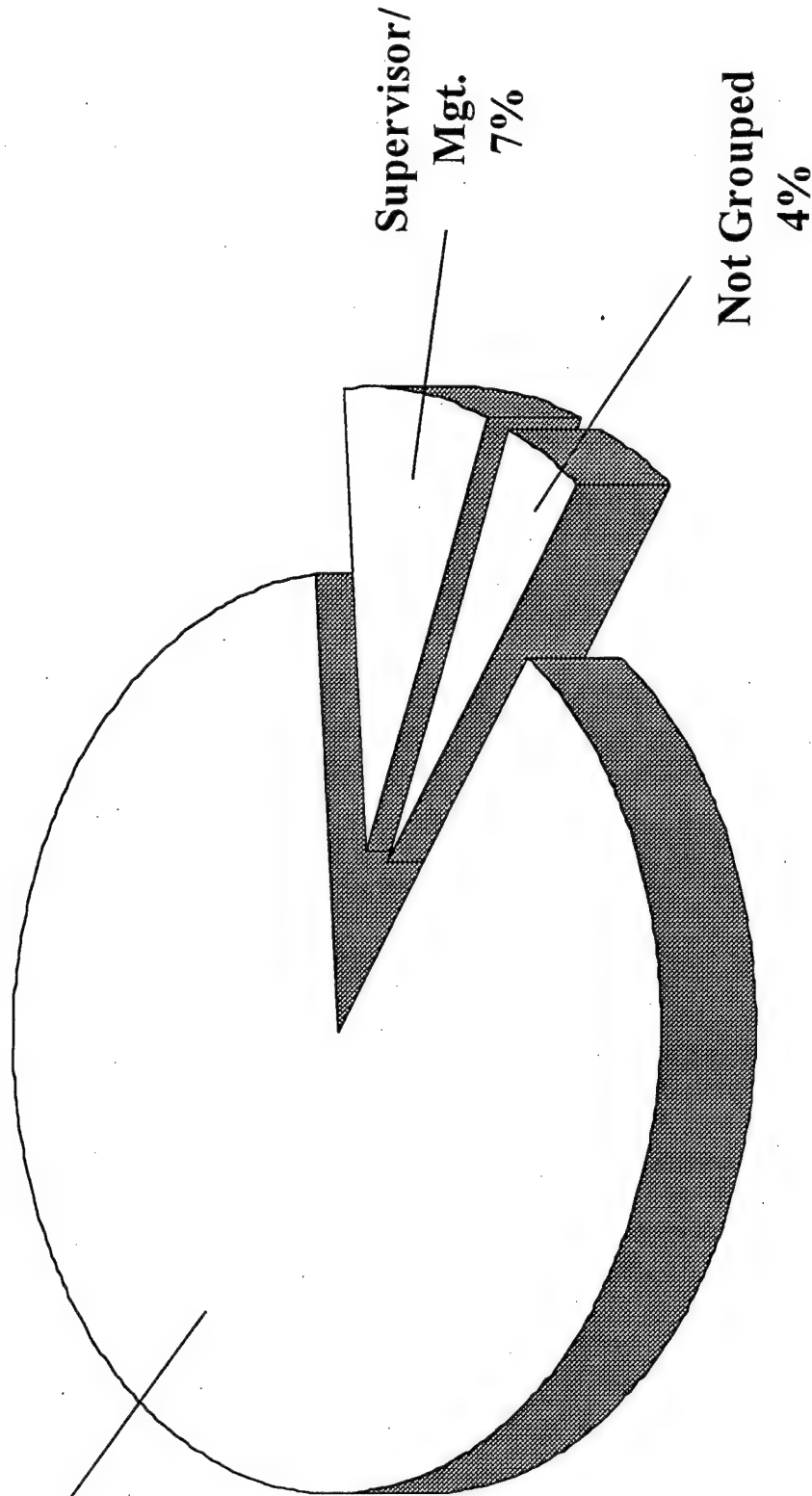
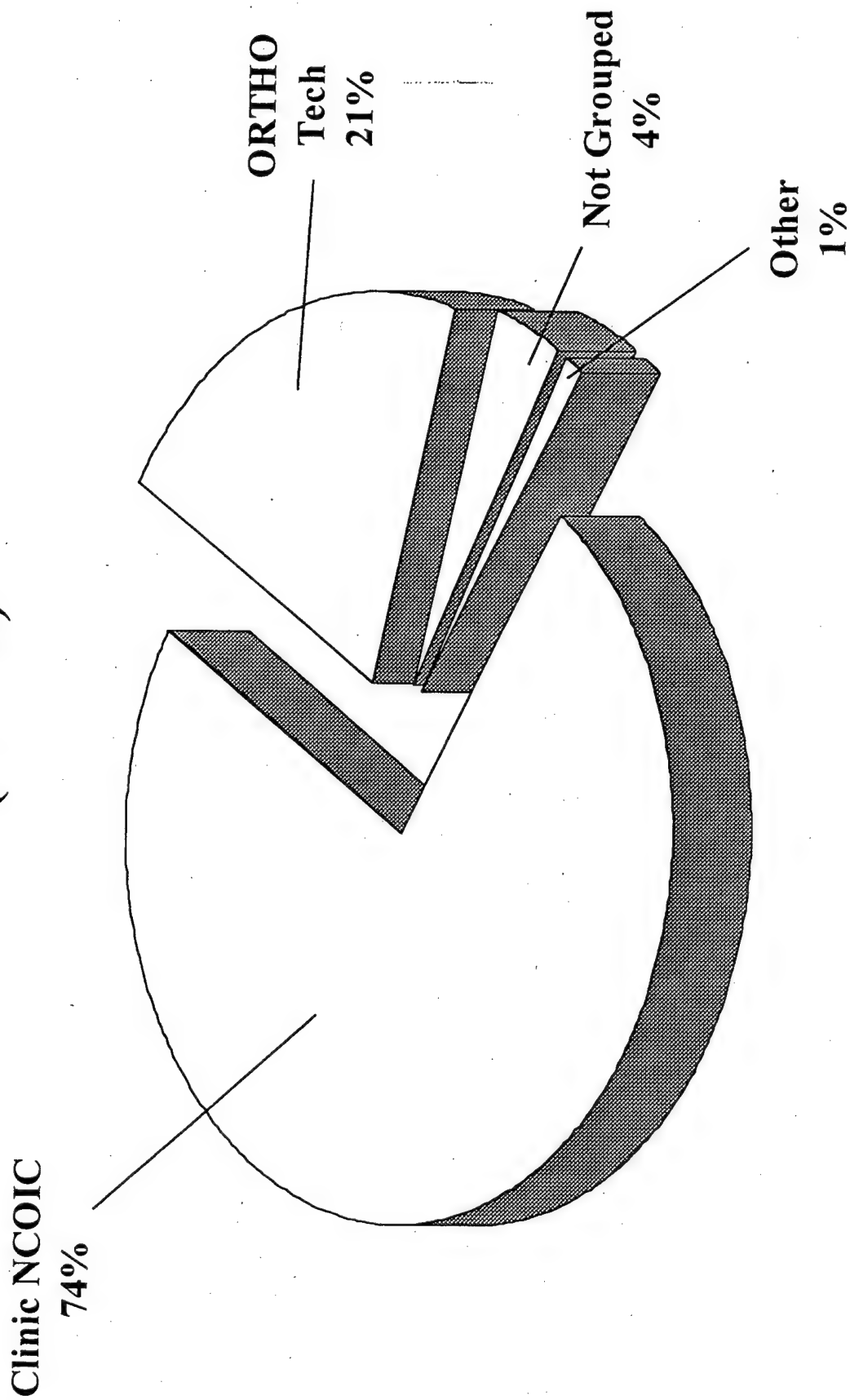


FIGURE 3

4N1X1C CAREER LADDER JOBS (N = 78)



*Other: Surgical Services Cluster

FIGURE 4

4N1X1D CAREER LADDER JOBS

(N = 35)

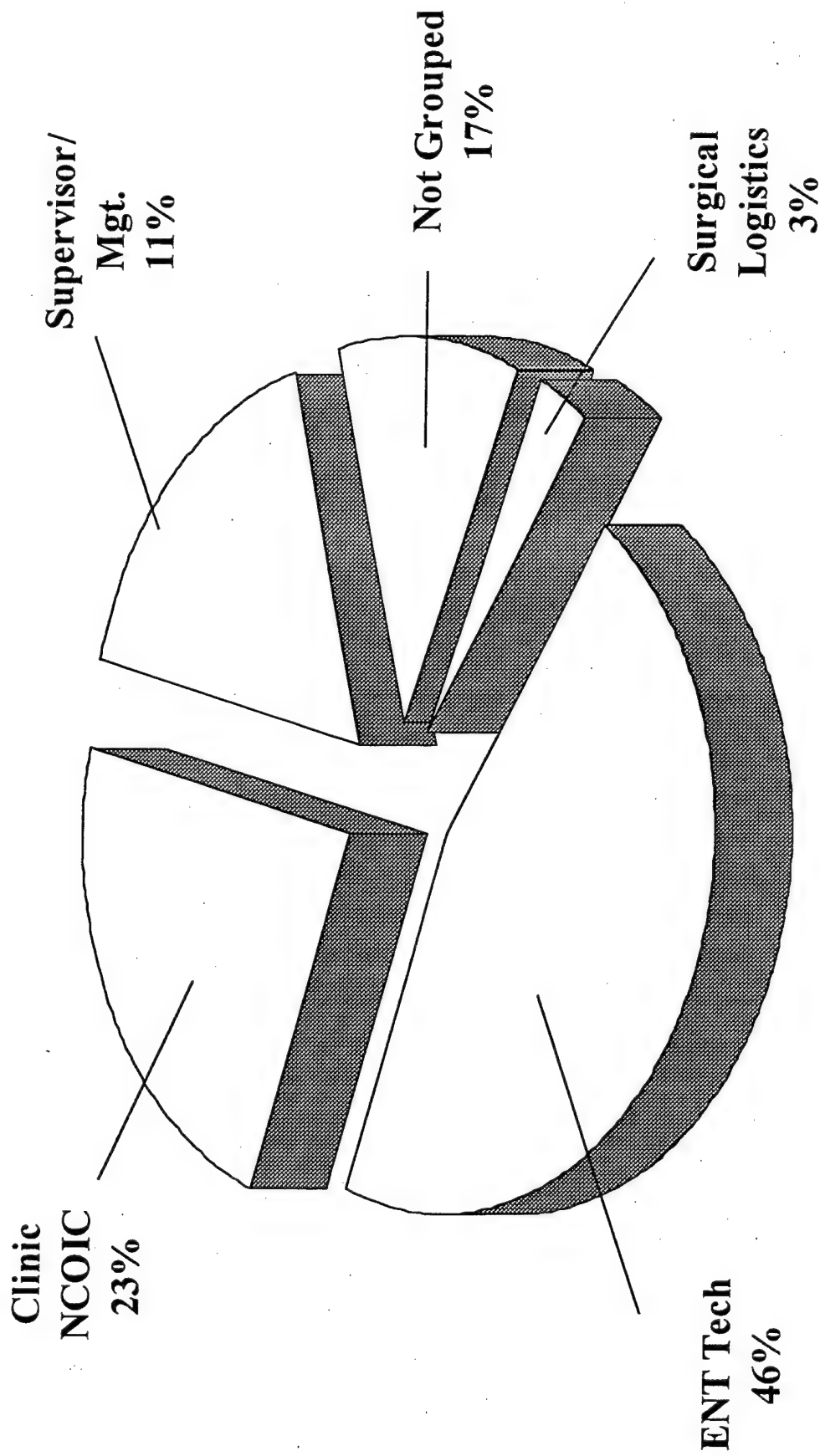


FIGURE 5

The respondents forming these jobs account for 94 percent of the survey sample (Figure 1). The remaining 6 percent are performing tasks or a series of tasks that did not group with any of the defined jobs. Some of the job titles given by respondents representative of these personnel include: Ambulatory Procedure Unit Technician, Anesthesia Technician, OB/GYN Surgical Technician, Cardiothoracic Technician, CDC Writer, NCOIC Health Wellness Center, NCOIC Medical Readiness Instructor, NCOIC Surgical Research

Group Descriptions

The following paragraphs contain brief descriptions of the jobs identified through the career ladder structure analysis. Appendix A lists representative tasks performed by identified cluster and job groups. Table 3 presents the relative time spent on duties by members of these specialty jobs. Table 4 provides demographic information for each cluster and job discussed within this report.

I. SURGICAL SERVICES CLUSTER (ST043). This cluster represents the core jobs of the Surgical Services career ladder. The three jobs identified within this cluster are the Entry-Level OR Technician, OR Technician, and Phase II Training Instructor. The 478 members in this cluster have no shred designation ("Slick") and represent the largest identified group, encompassing 63 percent of the survey sample. Because this is the basic job of the career ladder, it is performed by the most recently trained through the more senior AFSC 4N1X1 personnel. Tasks performed by these members encompass the essence of Surgical Services activities as members perform sterile and non-sterile functions in the operating room when assisting the surgeon as scrub specialist or assisting the nurse in performing circulating duties. Members within this cluster spend the majority of their time performing tasks in all duties (see Table 3). They spend 29 percent of their time performing sterile operating room activities, 15 percent performing central sterile supply (CSS) activities, 11 percent performing non-sterile intraoperative operating room activities, and 7 percent performing non-sterile preoperative operating room activities, non-sterile postoperative operating room activities, operating room transport or outside float activities, and administrative or management activities. The following tasks demonstrate the nature of work performed by these individuals:

- perform hand and arm scrubs
- establish sterile fields in OR while scrubbed
- arrange sterile instruments and supplies on back tables while scrubbed
- pass instruments or supplies to operating team members using traditional techniques
- assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed
- perform preliminary cleaning of soiled instruments prior to return to CSS
- identify and properly manage dirty instruments or contaminated field
- don or doff sterile gowns or gloves
- assist surgeons in applying sterile drapes while scrubbed

TABLE 3
AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

DUTIES	SURGICAL SERVICES CLUSTER (N=478)	CSS TECH JOB (N=12)	ENT TECH JOB (N=20)
A PERFORMING GENERAL CLINICAL ACTIVITIES	3	3	26
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	15	83	5
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES	2	0	*
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	29	*	26
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	7	*	4
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	11	0	7
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	7	*	3
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	7	0	2
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	*	0	8
J PERFORMING ORTHOPEDIC ACTIVITIES	*	0	*
K PERFORMING UROLOGY ACTIVITIES	*	0	0
L PERFORMING RESEARCH ACTIVITIES	*	0	0
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	5	3	10
N PERFORMING MEDICAL READINESS ACTIVITIES	3	6	3
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	7	3	5
P PERFORMING TRAINING ACTIVITIES	3	2	*

* Indicates less than 1 percent

TABLE 3 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

DUTIES	UROLOGY TECH JOB (N=25)	ORTHO TECH JOB (N=17)	CLINIC NCOIC JOB (N=74)
A PERFORMING GENERAL CLINICAL ACTIVITIES	25	35	21
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	3	*	2
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES	*	0	*
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	21	1	13
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	3	*	3
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	8	*	6
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	3	*	2
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	1	*	2
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	0	0	1
J PERFORMING ORTHOPEDIC ACTIVITIES	0	35	17
K PERFORMING UROLOGY ACTIVITIES	9	0	*
L PERFORMING RESEARCH ACTIVITIES	*	*	*
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	12	11	11
N PERFORMING MEDICAL READINESS ACTIVITIES	2	*	4
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	10	14	13
P PERFORMING TRAINING ACTIVITIES	2	3	4

* Indicates less than 1 percent

TABLE 3 (CONTINUED)

AVERAGE PERCENT TIME SPENT ON DUTIES BY CAREER LADDER JOBS

DUTIES	SURGICAL LOGISTICS JOB (N=14)	SUPV/ MGT JOB (N=61)	SUPERINT JOB (N=5)
A PERFORMING GENERAL CLINICAL ACTIVITIES	2	2	0
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	7	7	0
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES		*	0
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	3	2	0
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	1	*	0
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	*	1	0
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	2	*	0
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	1	*	0
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	1	*	0
J PERFORMING ORTHOPEDIC ACTIVITIES	0	*	0
K PERFORMING UROLOGY ACTIVITIES	0	*	0
L PERFORMING RESEARCH ACTIVITIES	0	*	0
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	66	16	2
N PERFORMING MEDICAL READINESS ACTIVITIES	*	4	4
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	12	50	94
P PERFORMING TRAINING ACTIVITIES	4	16	0

* Indicates less than 1 percent

TABLE 4

SELECTED BACKGROUND DATA FOR CAREER LADDER JOBS

	SURGICAL SERVICES CLUSTER	CSS TECH JOB	ENT TECH JOB	UROLOGY TECH JOB	ORTHO TECH JOB
NUMBER IN GROUP	478	12	20	25	17
PERCENT OF SAMPLE	63%	2%	3%	3%	2%
PERCENT IN CONUS	84%	83%	85%	92%	88%
DAFSC DISTRIBUTION:					
4N131	41%	34%	5%	0	6%
4N131B	0	0	0	8%	0
4N131C	0	0	0	0	12%
4N131D	0	0	15%	0	0
4N151	51%	58%	10%	0	0
4N151B	0	0	0	60%	0
4N151C	0	0	0	0	76%
4N151D	0	0	60%	0	0
4N171	8%	8%	5%	0	0
4N171B	0	0	0	32%	0
4N171C	0	0	0	0%	6%
4N171D	0	0	5%	0	0
4N191	0	0	0	0	0
PREDOMINANT GRADE(S)	E-3	E-4	E-4/E-5	E-5	E-4/E-5
AVERAGE MONTHS IN CAREER FIELD	61	76	72	65	64
AVERAGE TAFMS	72	80	94	139	117
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	57%	33%	15%	0	6%
PERCENT SUPERVISING	28%	33%	15%	52%	65%
AVERAGE NUMBER OF TASKS PERFORMED	143	43	133	171	88

TABLE 4 (CONTINUED)
SELECTED BACKGROUND DATA FOR CAREER LADDER JOBS

	CLINIC NCOIC JOB	SURGICAL LOGISTICS JOB	SUPV/ MGT JOB	SUPERINT JOB
NUMBER IN GROUP	74	14	61	5
PERCENT OF SAMPLE	10%	2%	8%	1%
PERCENT IN CONUS	74%	93%	89%	100%
DAFSC DISTRIBUTION:				
4N131	1%	14%	2%	0
4N131B	0	0	0	0
4N131C	5%	0	0	0
4N131D	1%	0	0	0
4N151	9%	72%	24%	0
4N151B	0	0	0	0
4N151C	55%	0	0	0
4N151D	5%	7%	5%	0
4N171	0	7%	64%	80%
4N171B	0	0	3%	0
4N171C	20%	0	0	0
4N171D	4%	0	2%	0
4N191	0	0	0	20%
PREDOMINANT GRADE(S)				
AVERAGE MONTHS IN CAREER FIELD	E-4	E-4	E-6/E-7	E-7
AVERAGE TAFMS	84	68	151	177
PERCENT IN FIRST ENLISTMENT (1-48 MOS TAFMS)	124	117	193	237
	4%	7%	0	0
PERCENT SUPERVISING				
AVERAGE NUMBER OF TASKS PERFORMED	48%	56%	93%	40%
	213	58	122	28

- break down sterile fields while scrubbed
- pass specimens to circulators
- pull surgical supplies, instruments, or equipment
- identify drugs or solutions prior to accepting transfer to sterile field while scrubbed

Personnel in this cluster average 6 years TAFMS. Personnel in this cluster are in the paygrades of E-2 through E-7 and most (51 percent) hold a 5-skill level (see Table 4). Members perform an average of 143 tasks. This job contains the highest number of members in their first enlistment (57 percent).

The first job identified with the cluster is the Entry-Level OR Technician. These individuals spend 60 percent of their time performing sterile operating room activities (Table 3, Duty D) and 16 percent of their time performing non-sterile preoperative and intraoperative OR activities (Table 3, Duty E and F). These 34 members perform an average of 56 tasks which consist of establishing sterile fields in OR while scrubbed, performing hand and arm scrubs, arranging sterile instruments and supplies on back tables while scrubbed, and passing instruments or supplies to operating team members using traditional techniques.

The second job within the cluster is comprised of 434 OR Technicians. The responsibilities of these respondents differ from those in the Entry-Level OR Technician Job, although they perform many of the same general tasks. Their distinguishing feature is the performance of tasks associated with CSS activities. They perform tasks, such as hand and arm scrubs, establishing sterile fields in OR while scrubbed, arranging sterile instruments and supplies on back tables while scrubbed, assembling instrument sets or equipment after cleaning, and cleaning instruments or equipment for storage or reprocessing.

The final job within the cluster is comprised of nine Phase II Training Instructors. These members are distinguished by the amount of time they spend performing administrative and training activities. They perform an average of 134 tasks, the majority of which are centered around conducting on-the-job training (OJT), counseling trainees on training progress, evaluating progress of trainees, maintaining training records or files, inspecting training materials or aids for operation suitability, and developing or procuring training materials or aids.

II. CSS TECHNICIAN JOB (ST069). The 12 airman forming this job account for 2 percent of the survey sample. They perform a number of tasks dealing specifically with maintaining equipment, to include the cleaning and preparation of instruments and reusable supplies for terminal sterilization and decontamination. The CSS Technician serves as the main support function for the OR and clinic. Members in this job spend 82 percent of their duty time performing CSS activities (Table 3, Duty B) and 6 percent of their duty time performing medical readiness activities. They perform an average of 43 tasks and are distinguished by the time they spend performing the following tasks:

- assemble instrument sets or equipment after cleaning
- wrap and label instrument sets for sterilization
- prepare and sterilize items using paper, plastic, or paper and plastic peel-packs
- inspect and identify instruments for operation, repair, or salvage
- clean instruments or equipment for storage or reprocessing
- load or unload CSS sterilizers
- prepare and sterilize items using rigid sterilization containers
- monitor CSS sterilizer effectiveness using biological indicators
- prepare surgical supplies or instruments from CSS stock
- fold linens for sterilization
- perform routine chemical disaffection of surgical instruments or supplies in CSS
- sort equipment for cleaning

Fifty-eight percent of these individuals hold the 5-skill level while 33 percent hold the 3-skill level. Seventy-five percent are in paygrade E-4 and E-5. This job contains the second highest number of members in their first enlistment (33 percent). The average time in the career field is 6 years with an average of 7 years TAFMS.

III. OTORHINOLARYNGOLOGY (ENT) TECHNICIAN JOB (ST128). The 20 members of this job are designated by the D-shred. They perform many of the same routine clinical functions as the "Slick" and Urology Technicians – answering appointment telephone lines, scheduling clinic patients' appointments, scheduling patients for surgery, breaking down sterile fields while scrubbed, passing instruments or supplies to operating team members using traditional techniques, and assisting surgeons in applying sterile drapes while scrubbed. While they may perform many of the same general tasks, their distinguishing feature is the performance of tasks associated with ENT activities, accounting for 8 percent of their relative job time. Accounting for only 3 percent of the survey sample, they perform an average of 133 tasks, with the majority of their time spent performing tasks under Duty D (Performing Sterile Operating Room Activities), Duty A (Performing General Clinical Activities), Duty M (Performing Logistics or Resource Management Activities), and Duty I (Performing ENT Activities). They are distinguished by the time they spend performing the following tasks:

- remove foreign bodies from ears using suction method
- remove foreign bodies from ears using alligator forceps
- remove foreign bodies from ears using curettage method
- remove foreign bodies from ears using wire loops
- perform routine ear examinations with otoscopes
- assist physicians with otorhinolaryngology procedures
- schedule patients for surgery
- assist physicians with otorhinolaryngology surgical procedures in clinic
- break down sterile fields while scrubbed
- pass instruments or supplies to operating team members using traditional techniques

assist surgeons in applying sterile drapes while scrubbed
identify and properly manage dirty instruments or contaminated field
establish sterile fields in OR while scrubbed

The "D" shred personnel primarily comprise the ENT Job (80 percent) with 60 percent holding the 5-skill level. Eighty percent are in the paygrades E-4 and E-5, averaging 8 years TAFMS.

IV. UROLOGY TECHNICIAN JOB (ST102). The 25 respondents in this job belong to the B-shred and account for 3 percent of the survey sample. This job involves many of the same tasks performed by members of the ENT Technician Job, but the difference lies in the amount of time spent performing urology activities. Members within this job spend 25 percent of their duty time performing general clinical activities (Table 3, Duty A), 21 percent of their time performing sterile operating room activities (Table 3, Duty D), and nine percent of their time performing urology activities. They perform an average of 171 tasks which is the second highest for this career field. They are distinguished by the time they spend performing the following tasks:

assist physicians with urology procedures in clinic
instill xylocaine jellies intraurethrally
catheterize urology patients
collect catheterized urine specimens
collect clean catch urine specimens
prepare contrast media for urologic procedures
perform urodynamic tests, such as cystometrograms or urine flow
assist physicians with urological surgery procedures
prepare and drape patients for clinic procedures
assist physicians with minimally invasive procedures
prepare patients for clinic examinations
assist physicians with endoscopic procedures

Sixty percent of these individuals hold the 5-skill level while 32 percent have a 7-skill level. Sixty-eight percent are in the paygrade E-5, with an additional 16 percent in paygrade E-4. These members average 12 years TAFMS with none in their first enlistment.

V. ORTHOPEDIC TECHNICIAN JOB (ST066). Personnel performing the Orthopedic Technician Job hold the C-shred. This job involves applying and removing casts and splints as directed by health care providers, assembling and applying orthopedic traction devices, and instructing patient in using crutches, canes, and other orthopedic appliances. The 17 airmen performing this job (only 2 percent of the survey sample) spend 35 percent of their relative job

time performing orthopedic activities (Table 3, Duty J), 35 percent performing general clinical activities (Table 3, Duty A), and 14 percent performing activities (Table 3, Duty O). The average number of tasks performed is 88. Examples of tasks most commonly performed includes:

- remove splints
- remove casts
- order x-rays
- prepare patients for removal of casts or splints
- apply short leg plaster or fiberglass casts
- schedule clinic patients appointments
- apply standard long arm plaster or fiberglass casts
- remove sutures from clinic patients
- apply standard short arm plaster or fiberglass casts
- apply short arm scaphoid plaster or fiberglass splints
- remove skin staples from clinic patients
- apply short leg plaster or fiberglass splints

Seventy-six percent of these individuals hold the 5-skill level. Eighty-two percent are in the paygrades E-4 and E-5, with an additional 12 percent in paygrade E-7. The average time in the career field is 5 years, with an average of 10 years TAFMS. Forty-seven percent of all members in this group are currently supervising others.

VI. CLINIC NCOIC JOB (ST087). This is the supervisory job in the clinic. These members perform many of the same technical tasks as those in the other clinical jobs, but they spend an additional 13 percent of their time performing administrative or management activities (Table 3, Duty O). Performing the most tasks (average of 213) in the career field, 21 percent of their relative job time is spent performing general clinic activities (Table 3, Duty A), while 29 percent is spent performing sterile operating room activities and orthopedic activities (Table 3, Duties D and J). The diversity of the work members of this job perform is reflected by the following tasks:

- pick up daily administrative distributions
- receive supplies from medical logistics
- order medical supplies using local purchase procedures
- review SFs 513 (Medical Record – Consultation Sheet)
- review patients health records prior to appointments or surgery
- schedule clinic patients appointments
- prepare patients for removal of casts or splints
- apply short arm plaster or fiberglass splints, other than scaphoid or sugar tong
- assist physicians with closed reduction of fractures
- review backorder reports

establish sterile fields in OR while scrubbed
coordinate standard medical supply purchases with medical materiel

This is a very diversified group with 80 percent of the personnel within the "C" shred, 10 percent within the "Slick", and 9 percent within the "D" shred (Table 4). Fifty-five percent of DAFSC 4N1X1C personnel hold the 5-skill level, while 20 percent hold a 7-skill level. Forty percent of these members are in the paygrade E-4, with an additional 34 percent in paygrade E-5. The average time in the career field is 7 years with an average of 10 years TAFMS.

VII. SURGICAL LOGISTICS JOB (ST068). The 14 respondents in this job account for only 2 percent of the survey sample. They perform a number of tasks dealing specifically with maintaining organizational equipment or supply records. Because of the array of instruments and equipment needed for surgical procedures and the amount of supplies consumed, it is necessary to have separate personnel assigned to manage these resources. Members with this job spend 66 percent of their time performing logistics or resource management activities (Table 3, Duty M), 12 percent performing administrative or management activities (Table 3, Duty O), and 7 percent performing central sterile supply (CSS) activities (Table 3, Duty B). They perform an average of 58 tasks and are distinguished by the time they spend performing the following tasks:

- verify receipt of supplies from medical logistics
- order medical supplies using local purchase procedures
- research data from vendors for equipment purchases or standard medical supply purchases
- review using activity issue/turn-in lists
- review backorder reports
- research supply catalogs or medical catalog (MEDCAT) supply listings
- receive supplies from medical logistics
- order medical supplies from USAF supply agencies, other than pharmacy or linen supplies
- coordinate standard medical supply purchases with medical materiel
- order nonmedical supplies using local purchase procedures
- prepare shopping guides
- maintain organizational equipment or supply records
- arrange consignment purchases with vendors, salespersons, or logistics

"Slick" personnel primarily comprise this job (93%) with seventy-one percent of these individuals holding the 5-skill level and 7 percent holding the 7-skill level. Fifty percent of these members are in the paygrade E-4, with an additional 36 percent in paygrades E-5. The average time in the career field is 6 years with an average 10 years TAFMS.

VIII. SUPERVISORY AND MANAGEMENT (ST052). This job encompasses those administrative and management functions necessary for the operation of any medical environment. Comprising the second most senior and experienced individuals in the career ladder, these 61 members account for 8 percent of the survey sample. They spend almost half their duty day (48 percent) performing administrative or management activities and perform few, if any technical tasks. Thirty-two percent of their time is spent performing logistics or resource management activities and training activities. They are found supervising military personnel, participating in general meetings, establishing work assignments, and evaluating personnel for compliance with performance standards. Ninety-three percent of these individuals report supervisory responsibilities, supervising an average of five people. These airmen perform an average of 65 tasks. The following are representative of the work performed:

- inspect personnel for compliance with military standards
- counsel subordinates concerning personal matters
- evaluate personnel for compliance with performance standards
- interpret policies, directives, or procedures for subordinates
- determine or establish work assignments or priorities
- write recommendations for awards or decorations
- write or indorse military performance reports
- maintain administrative files
- assign personnel to work areas or duty positions

Members of this job are the second most senior, as they average 13 years TAFMS and 16 years time in the career field. Primarily made up of the "Slicks" (90 percent), 64 percent of these individuals hold the 7-skill level, while 24 percent hold the 5-skill level. Seventy-eight percent of these members are in the paygrade of E-6 and E-7, while 18 percent are in the paygrade of E-5. Ninety-three percent of these individuals report supervising an average of 5 people.

IX. SUPERINTENDENT JOB (ST033). These 5 members are the most experienced members in the survey, accounting for 1 percent of the survey sample. As with most specialties, there are nontechnical jobs performed by senior level personnel. Ninety-four percent of their relative job time is spent performing administrative or management activities (Table 3, Duty O), with an additional 6 percent spent performing medical readiness, logistics or resource management activities (Table 3, Duty M and N). Their primary responsibility is to ensure proper coordination of work activities within the hospital and clinic. These job incumbents perform an average of 28 tasks. The following tasks demonstrate the nature of work performed by these senior individuals:

- evaluate personnel for promotion, demotion, reclassification, or special awards
- initiate personnel action requests
- conduct supervisory performance feedback sessions

interpret policies, directives, or procedures for subordinates
initiate or maintain call rosters or workcenter pyramid recall rosters
counsel subordinates concerning personal matters
conduct general meetings, such as staff meetings, briefings,
conferences, or workshops
write correspondence, such as letters, point papers, or staff summary sheets
develop or implement quality improvement (QI) programs

Members of this job are senior, as they average 20 years TAFMS and 15 years time in the career field. Eighty percent of these individuals hold the 7-skill level, while 20 percent hold the 9-skill level. All members are in the paygrade of E-7. Forty percent of these individuals report supervising an average of 7 people.

Comparison of Current Jobs to Previous Survey Findings

The results of the specialty job analysis were compared to those of OSR AFPT 90-903-003, Surgical Services, dated March 1995. After reviewing the jobs identified in 1995, all of the groups with substantial numbers of personnel could be matched to similar jobs in the current study (see Table 5). Although, some comparable groups from 1995 to 1999 reflect different percentages of the sample, this variation could generally be attributed to modifications in the task list or to the analysis approach used.

The following jobs were identified in the 1995 career ladder structure, but did not have a direct match in the current study: Surgical Suite NCOIC Job, and Surgical Suite Urology Technician Job. Jobs found in the 1999 survey but not in the 1995 survey include the Clinic NCOIC Job, Entry-Level Operating Room (OR) Technician Job, Phase II Training Instructor Job, and Superintendent Job. Differences in job names reflect how tasks were grouped. Aside from these minor variations involving a very small number of personnel, the vast majority of the current sample were found to be performing jobs identified in 1995, thus displaying a relative stable career ladder over time.

Job Satisfaction Across Jobs

Job satisfaction data for identified job groups and clusters are provided in Table 6. An examination of these data can show how overall job satisfaction may be influenced by the type of job performed. Overall, job satisfaction was fairly high across specialty jobs, with a decrease in sense of accomplishment for the CSS Technician Job. Personnel in the Surgical Services Cluster, CSS Technician Job, Orthopedic Technician Job and Surgical Logistics Job showed low reenlistment intentions, the Clinic NCOIC Job showed the highest reenlistment intentions. Superintendents reported the highest percentage of intentions to retire. Job satisfaction was highest for the Clinic NCOIC Job and lowest for the CSS Technician Job.

TABLE 5
SPECIALTY JOB COMPARISONS BETWEEN CURRENT AND 1995 SURVEYS

CURRENT SURVEY (N=764)	1995 SURVEY (N=699)
SURGICAL SERVICES CLUSTER (N=478) Operating Room (OR) Technician Job (N=434)	OPERATING ROOM/NURSING CARE CLUSTER (N=595) General Surgery Technician Job (N=352) Surgical Suite NCOIC Job (N=77)
UROLOGY TECHNICIAN JOB (N=25)	Surgical Suite Urology Technician Job (N=18)
OTORHINOLARYNGOLOGY (ENT) TECHNICIAN JOB (N=20)	Clinic Urology Technician Job (N=6)
ORTHOPEDIC TECHNICIAN JOB (N=17)	Otorhinolaryngology (ENT) Technician Job (N=31) Orthopedic Technician Job (N=66)
CENTRAL STERILE SUPPLY (CSS) TECHNICIAN JOB (N=12)	CENTRAL STERILE SUPPLY JOB (N=14)
SURGICAL LOGISTICS JOB (N=14)	CENTRAL STERILE SUPPLY NCOIC JOB (N=7) SURGICAL LOGISTICS JOB (N=15)
SUPERVISORY AND MANAGEMENT JOB (N=61)	SURGICAL SERVICES MANAGEMENT/SUPERVISION JOB (N=32)
CLINIC NCOIC JOB (N=74)	
SUPERINTENDENT JOB (N=5)	
SURGICAL SERVICES CLUSTER Entry-Level Operating Room (OR) Technician Job (N=34) Phase II Training Instructor Job (N=9)	

- Indicates no match in report
* Matched

TABLE 6

**JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS AND CLUSTERS
(PERCENT MEMBERS RESPONDING)**

	SURGICAL SERVICES CLUSTER (N=478)	CSS TECH JOB (N=12)	ENT TECH JOB (N=20)	UROLOGY TECH JOB (N=25)	ORTHO TECH JOB (N=17)	CLINIC NCOIC JOB (N=74)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	83	50	80	76	88	89
SO-SO	10	25	10	16	6	7
DULL	7	25	10	8	6	4
<u>PERCEIVED USE OF TALENTS</u>						
FAIRLY WELL TO PERFECTLY	86	88	85	95	71	91
LITTLE OR NOT AT ALL	14	12	15	5	29	9
<u>PERCEIVED USE OF TRAINING</u>						
FAIRLY WELL TO PERFECTLY	91	84	80	92	76	91
LITTLE OR NOT AT ALL	9	16	20	8	24	9
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
SATISFIED	75	58	75	80	82	90
NEUTRAL	12	25	10	8	6	3
DISSATISFIED	13	17	15	12	12	7
<u>REENLISTMENT INTENTIONS</u>						
YES, OR PROBABLY YES	42	51	60	64	53	67
NO, OR PROBABLY NO	50	43	40	24	29	28
PLAN TO RETIRE	8	6	0	12	18	5

TABLE 6 (CONTINUED)

**JOB SATISFACTION INDICATORS FOR IDENTIFIED JOB GROUPS AND CLUSTERS
(PERCENT MEMBERS RESPONDING)**

	SURGICAL LOGISTICS JOB (N=14)	SUPV/ MGT JOB (N=61)	SUPERINT JOB (N=5)
<u>EXPRESSED JOB INTEREST</u>			
INTERESTING	72	70	80
SO-SO	14	22	0
DULL	14	8	20
<u>PERCEIVED USE OF TALENTS</u>			
FAIRLY WELL TO PERFECTLY	79	84	80
LITTLE OR NOT AT ALL	21	16	20
<u>PERCEIVED USE OF TRAINING</u>			
FAIRLY WELL TO PERFECTLY	71	70	80
LITTLE OR NOT AT ALL	29	30	20
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>			
SATISFIED	71	70	80
NEUTRAL	0	10	0
DISSATISFIED	29	20	20
<u>REENLISTMENT INTENTIONS</u>			
YES, OR PROBABLY YES	42	59	40
NO, OR PROBABLY NO	50	5	0
PLAN TO RETIRE	8	36	60

Summary

In summary, structure analysis reveals the Surgical Services career ladder to be quite heterogeneous, due to the diversity of tasks performed by those personnel designated as "Slicks" or belonging to the "B", "C", or "D" shred. One cluster and eight jobs were identified: Surgical Services Cluster, CSS Technician Job, ENT Technician Job, Urology Technician Job, Orthopedic Technician Job, Clinic NCOIC Job, Surgical Logistics Job, Supervisory and Management Job, and Superintendent Job.

ANALYSIS OF DAFSC GROUPS

An analysis of DAFSC groups, in conjunction with the analysis of the career ladder structure, is an important part of each occupational survey. The DAFSC analysis identifies differences in tasks performed at the various skill levels. This information may then be used to evaluate how well career ladder documents, such as the AFMAN 36-2108 *Airman Classification* and the Specialty Training Standard (STS) reflect what career ladder personnel are actually doing in the field and what is required of their members.

The comparison of DAFSCs has been divided into subsections representing the "Slick", "B" shred, "C" shred, and "D" shred. The "Slick" subsection discusses members holding the 3-, 5-, 7-, and 9-skill levels. The shred subsections discuss members holding 3-, 5-, and 7-skill levels.

The distribution of skill-level groups across the career ladder specialty jobs is displayed in Tables 7, while Table 8 offers another perspective by displaying the relative percent time spent on each duty across the skill-level groups. The Surgical Services career ladder has 70 percent of the sample holding either the 3- or 5-skill level. Three- and 5-skill level personnel spend the vast majority of their job time performing sterile operating room activities. A typical pattern of progression is present, with personnel spending more of their relative time on duties involving supervisory, managerial, and training tasks as they move upward toward the 7- or 9-skill level. It is also obvious, though, that 7-skill level personnel are still involved with technical task performance, as will be pointed out in the specific skill-level group discussions below.

Skill Level Descriptions

DAFSC 4N131. The 213 airmen in the 3-skill level group represent 28 percent of the survey sample. Ninety-one percent of the 3-skill level members are in Surgical Services Cluster and 2 percent are in the CSS Technician Job (see Table 7). They perform an average of 121 tasks. Performing a highly technical job, 83 percent of their relative duty time is devoted to technical duties such as performing sterile operating room activities, central sterile supply activities, nonsterile intraoperative operating room activities, performing operating room transport or outside float activities, nonsterile postoperative operating room activities, nonsterile preoperative room activities (see Table 8). Table 9 displays representative tasks performed by the highest percentages of these airmen.

DAFSC 4N151. The 320 airmen in the active duty 5-skill level group constitute 42 percent of the survey sample (largest DAFSC group of the survey) and perform an average of 165 tasks. Seventy-seven percent of these 5-skill level members are in the Surgical Services Cluster. (see Table 7). Performing a highly technical job, 62 percent of their relative job time is devoted to duties covering sterile operating room activities, central sterile supply activities, nonsterile preoperative operating room activities, nonsterile intraoperative operating room activities, nonsterile postoperative operating room activities, and operating room transport or outside float

TABLE 7

DISTRIBUTION OF AFSC 4N1X1 SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)

<u>SPECIALTY JOBS</u>		DAFSC 4N131 (N=213)	DAFSC 4N151 (N=320)	DAFSC 4N171 (N=88)	DAFSC 4N191 (N=2)
I. SURGICAL SERVICES CLUSTER		91	77	41	50
A. Entry Level Operating Room Technician Job		7	6	0	0
B. Operating Room Technician Job		84	68	40	50
C. Phase II Instructor		0	3	1	0
II. CENTRAL STERILE SUPPLY (CSS) TECHNICIAN JOB		2	2	1	0
III. OTORHINOLARYNGOLOGY (ENT) TECHNICIAN JOB		*	*	1	0
IV. UROLOGY TECHNICIAN JOB		0	0	0	0
V. ORTHOPEDIC TECHNICIAN JOB		*	0	0	0
VI. CLINIC NCOIC JOB		*	2	0	0
VII. SURGICAL LOGISTICS JOB		*	3	1	0
VIII. SUPERVISORY AND MANAGEMENT JOB		*	5	44	0
IX. SUPERINTENDENT JOB		0	0	5	50
X. NOT GROUPED		6	10	7	0

TABLE 8

**TIME SPENT ON DUTIES BY AFSC 4N1X1 SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)**

DUTIES	DAFSC 4N131 (N=213)	DAFSC 4N151 (N=320)	DAFSC 4N171 (N=88)	DAF 4N1 (N=)
A PERFORMING GENERAL CLINICAL ACTIVITIES	4	4	2	0
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	19	14	9	2
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES	2	2	1	*
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	32	24	7	4
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	7	6	3	1
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	10	7	4	2
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	7	6	2	2
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	8	5	2	1
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	*	*	*	0
J PERFORMING ORTHOPEDIC ACTIVITIES	1	1	*	*
K PERFORMING UROLOGY ACTIVITIES	*	*	*	0
L PERFORMING RESEARCH ACTIVITIES	*	*	0	0
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	3	9	13	6
N PERFORMING MEDICAL READINESS ACTIVITIES	3	4	4	9
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	2	11	41	64
P PERFORMING TRAINING ACTIVITIES	1	6	11	8

* Indicates less than 1 percent

TABLE 9

**REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N131 PERSONNEL**

TASKS		PERCENT MEMBERS PERFORMING (N=213)
D0126	Establish sterile fields in OR while scrubbed	93
D0127	Identify and properly manage dirty instruments or contaminated field	92
D0133	Perform hand and arm scrubs	92
D0124	Don or doff sterile gowns or gloves	92
D0132	Pass specimens to circulators	92
D0136	Prepare and handle specimens while scrubbed	92
D0099	Arrange sterile instruments and supplies on back tables while scrubbed	91
G0189	Stock OR with sterile or nonsterile supplies	91
D0129	Label drugs or solutions within sterile field	91
D0134	Perform preliminary cleaning of soiled instruments prior to return to CSS	91
D0120	Assist surgeons in applying sterile drapes while scrubbed	91
D0123	Dispose of sterile gowns or gloves	91
D0122	Correct breaks in sterile techniques by members of operating teams while scrubbed	91
D0097	Adjust Mayo instrument tray stands while scrubbed	90
D0121	Break down sterile fields while scrubbed	90
D0131	Pass instruments or supplies to operating team members using traditional techniques	90
D0128	Identify drugs or solutions prior to accepting transfer to sterile field while scrubbed	90
E0150	Pull surgical supplies, instruments, or equipment	90
D0135	Perform sterile draping of surgical equipment, such as microscopes or x-ray units	89
D0119	Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	88
E0143	Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	88
D0098	Adjust overhead operating lights while scrubbed	88
D0118	Assist professional staff in donning or doffing sterile gowns or gloves while scrubbed	88
D0125	Don or doff surgical attire, other than sterile gowns or gloves, for operating room (OR) activities	88

Average number of tasks performed = 121

activities (see Table 8). Table 10 displays representative tasks performed by the highest percentages of airmen. Table 11 displays those tasks that reflect differences between the 3- and 5-skill level groups. A review of the tasks reveals that 5-skill level airmen perform virtually the same technical tasks as do the 3-skill level members. However, a higher percentage of 5-skill level members perform supervisory or management tasks.

DAFSC 4N171. The 88 NCOs in the active duty 7-skill level group constitute 12 percent of the survey sample and perform an average of 141 tasks. Forty-four percent of these 7-skill level members are in the Supervisory and Management Job and 41 percent are in the Surgical Services Cluster (see Table 7). Sixty-nine percent of their relative job time is spent performing management, administrative, resource management, logistics, medical readiness, and training duties (see Table 8). An additional 30 percent of their time is spent performing technical tasks. Table 12 displays representative tasks performed by the highest percentages of airmen. Table 13 displays those tasks that differentiate between the 5- and 7-skill level groups and also reflects the supervisory responsibilities incumbent to the 7-skill level population. Tasks performed by higher percentages of 5-skill level personnel are technical and operational in nature, whereas higher percentages of 7-skill level personnel perform the higher level supervisory and management functions.

DAFSC 4N191. The 2 senior NCOs in the 9-skill level active duty group constitute less than 1 percent of the survey sample and perform an average of 100 tasks. Fifty percent of these 9-skill level members are in the Surgical Services Cluster with the other 50 percent in the Superintendent Job (see Table 7). Table 8 shows that 87 percent of their relative job time is spent in the administrative, management, logistics, medical readiness, and training duties (Duties M, N, O, and P). Table 14 clearly shows that these senior NCOs perform supervisory and management specific tasks. Table 15 displays those tasks that clearly show the differences between the 7- and 9-skill level groups. It also clearly reflects the upper-level management responsibilities' incumbent to the 9-skill level.

TRAINING ANALYSIS

Occupational survey data are sources of information, which can be useful in the development, and revision of relevant training programs for entry-level personnel. Factors used to evaluate entry-level AFSC 4N1X1 Surgical Services training include jobs being performed by first-enlistment (1-48 months TAFMS) personnel, overall distribution of first-enlistment personnel across career ladder jobs, percent first-job (1-24 months TAFMS) and first-enlistment members spent performing specific tasks or using specific equipment items, ratings of how much TE tasks should receive in formal training, and ratings of relative TD.

TABLE 10
REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N151 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=320)
D0124 Don or doff sterile gowns or gloves	83
D0134 Perform preliminary cleaning of soiled instruments prior to return to CSS	82
D0126 Establish sterile fields in OR while scrubbed	82
D0133 Perform hand and arm scrubs	82
D0132 Pass specimens to circulators	81
D0127 Identify and properly manage dirty instruments or contaminated field	81
D0122 Correct breaks in sterile techniques by members of operating teams while scrubbed	81
D0120 Assist surgeons in applying sterile drapes while scrubbed	81
D0118 Assist professional staff in donning or doffing sterile gowns or gloves while scrubbed	80
D0123 Dispose of sterile gowns or gloves	80
D0129 Label drugs or solutions within sterile field	80
D0128 Identify drugs or solutions prior to accepting transfer to sterile field while scrubbed	80
D0136 Prepare and handle specimens while scrubbed	80
D0119 Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	80
D0099 Arrange sterile instruments and supplies on back tables while scrubbed	80
G0189 Stock OR with sterile or nonsterile supplies	80
E0150 Pull surgical supplies, instruments, or equipment	80
D0097 Adjust Mayo instrument tray stands while scrubbed	80
E0143 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	79
F0155 Assist sterile team members with donning or removing surgical attire	79
D0121 Break down sterile fields while scrubbed	78
D0098 Adjust overhead operating lights while scrubbed	78
D0131 Pass instruments or supplies to operating team members using traditional techniques	78
D0102 Assist physicians with laparoscopic procedures	76
D0135 Perform sterile draping of surgical equipment, such as microscopes or x-ray units	76

Average number of tasks performed = 135

TABLE 11

TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4N131 AND DAFSC 4N151 PERSONNEL
(PERCENT MEMBERS PERFORMING)

TASKS	DAFSC 4N131 (N=213)	DAFSC 4N151 (N=320)	DIFFERENCE
B0064 Load or unload css sterilizers	84	65	19
O0399 Conduct supervisory performance feedback sessions	2	41	-39
O0404 Counsel subordinates concerning personal matters	5	43	-38
P0467 Counsel trainees on training progress	10	47	-37
O0402 Consult daily assignment sheets	14	49	-36
O0406 Determine or establish work assignments or priorities	8	43	-35
P0466 Conduct on-the-job training (OJT)	21	54	-34
P0476 Evaluate progress of trainees	7	39	-33
O0390 Assign personnel to work areas or duty positions	9	40	-31
O0401 Conduct supervisory orientations for newly assigned personnel	3	34	-31

TABLE 12
REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N171 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=88)
O0404 Counsel subordinates concerning personal matters	85
O0433 Inspect personnel for compliance with military standards	85
O0458 Write recommendations for awards or decorations	85
O0422 Evaluate personnel for compliance with performance standards	82
O0399 Conduct supervisory performance feedback sessions	82
O0434 Interpret policies, directives, or procedures for subordinates	80
O0423 Evaluate personnel for promotion, demotion, reclassification, or special awards	80
O0396 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	80
O0406 Determine or establish work assignments or priorities	80
O0419 Establish performance standards for subordinates	78
O0457 Write or indorse military performance reports	77
P0468 Determine training requirements	77
O0390 Assign personnel to work areas or duty positions	76
O0437 Maintain administrative files	75
O0409 Develop or establish work methods or procedures	75
O0401 Conduct supervisory orientations for newly assigned personnel	75
O0410 Develop or establish work schedules	74
O0421 Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	73
O0403 Consult schedule of operations	72
O0449 Schedule personnel for TDY assignments, leaves, or passes	72
O0453 Write job or position descriptions	70
P0461 Brief personnel concerning training programs or matters	70
O0430 Initiate actions required due to substandard performance of personnel	70

Average number of tasks performed = 141

TABLE 13

**TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4N151 AND DAFSC 4N171 DAFSC PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 4N151 (N=320)	DAFSC 4N171 (N=88)	DIFFERENCE
H0198 Retrieve equipment or supplies for surgery from outside surgical suite	66	34	32
D0134 Perform preliminary cleaning of soiled instruments prior to return to CSS	82	51	31
D0100 Assist physicians with endoscopic procedures	68	38	30
D0136 Prepare and handle specimens while scrubbed	80	50	30
D0113 Assist physicians with orthopedic surgery procedures	67	36	30
D0132 Pass specimens to circulators	81	51	30
D0099 Arrange sterile instruments and supplies on back tables while scrubbed	80	50	30
D0126 Establish sterile fields in OR while scrubbed	82	52	30
D0097 Adjust Mayo instrument tray stands while scrubbed	80	51	29
<hr/>			
O0449 Schedule personnel for TDY assignments, leaves, or	15	72	-57
O0458 Write recommendations for awards or decorations	30	85	-55
O0453 Write job or position descriptions	17	70	-53
O0431 Initiate or maintain call rosters or workcenter pyramid recall rosters	17	68	-52
O0423 Evaluate personnel for promotion, demotion, reclassification, or special awards	28	80	-51
O0396 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	29	80	-50
O0421 Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	24	73	-49
O0433 Inspect personnel for compliance with military standards	37	85	-49
O0428 Initiate personnel action requests	12	60	-49

TABLE 14
REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N191 PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=2)
O0423 Evaluate personnel for promotion, demotion, reclassification, or special awards	100
O0458 Write recommendations for awards or decorations	100
O0437 Maintain administrative files	100
O0433 Inspect personnel for compliance with military standards	100
O0434 Interpret policies, directives, or procedures for subordinates	100
O0444 Pick up daily administrative distribution	100
O0443 Participate in QI programs	100
O0450 Sort or file daily administrative distribution	100
O0431 Initiate or maintain call rosters or workcenter pyramid recall rosters	100
O0404 Counsel subordinates concerning personal matters	100
O0451 Write correspondence, such as letters, point papers, or staff summary sheets	100
O0390 Assign personnel to work areas or duty positions	100
O0391 Assign sponsors for newly assigned personnel	100
O0396 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	100
O0447 Review mobility, contingency, disaster preparedness, or unit emergency or alert plans	100
O0405 Destroy Privacy Act materials or documents	100

Average number of tasks performed = 100

TABLE 15

**TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4N171 AND DAFSC 4N191 PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 4N171 (N=88)	DAFSC 4N191 (N=2)	DIFFERENCE
O0414 Develop or implement quality improvement (QI) programs	58	*	58
M0328 Draft budget requirements	57	*	57
F0163 Position sterile tables or related equipment, such as monitors, microscopes, or lasers	56	*	56
O0407 Develop organizational or functional charts	56	*	56
O0408 Develop self-inspection or self-assessment program checklists	56	*	56
P0480 Monitor trainee progress in 7-skill level read-ahead modules	53	*	53
F0161 Perform surgical skin cleansings	52	*	52
D0121 Break down sterile fields while scrubbed	52	*	52
D0097 Adjust Mayo instrument tray stands while scrubbed	51	*	51
E0146 Perform operator maintenance inspections of OR equipment	51	*	51
<hr/>			
N0380 Perform communications security (COMSEC) or	44	100	-56
O0429 Initiate requests for publications or forms	45	100	-55
O0447 Review mobility, contingency, disaster preparedness, or unit emergency or alert plans	45	100	-55
O0450 Sort or file daily administrative distribution	52	100	-48
O0443 Participate in QI programs	55	100	-45
J0284 Remove casts	5	50	-45
O0444 Pick up daily administrative distribution	56	100	-44
N0365 Don or doff chemical warfare personal protective clothing	59	100	-41
G0183 Log patient names into photobooks	10	50	-40

First-Enlistment Personnel

In this study, there are 300 AFSC 4N1X1 members in their first enlistment (1-48 months TAFMS), representing 39 percent of all surveyed AFSC 4N1X1 personnel. These personnel are primarily in the Surgical Services Cluster (see Figure 5). Table 16 shows the relative percent of time spent across duties by first-enlistment AFSC 4N1X1 members. The largest percent of their time (32 percent) is spent performing tasks related to sterile operating room activities. Another 17 percent is spent performing central sterile supply activities. Representative tasks performed by members in this group are listed in Table 17. Examples of these tasks include arranging sterile instruments and supplies on back tables while scrubbed, performing hand and arm scrubs, establishing sterile fields in OR while scrubbed, and passing instruments or supplies to operating team members using traditional techniques.

Table 18 presents a short list of special tools or equipment used or operated by AFSC 4N1X1 first-enlistment personnel. Some examples of this equipment include the steam sterilizer, electrical control operating tables, manual control operating tables, lead vests, laparoscopes and accessories, and gravity displacement steam sterilizers.

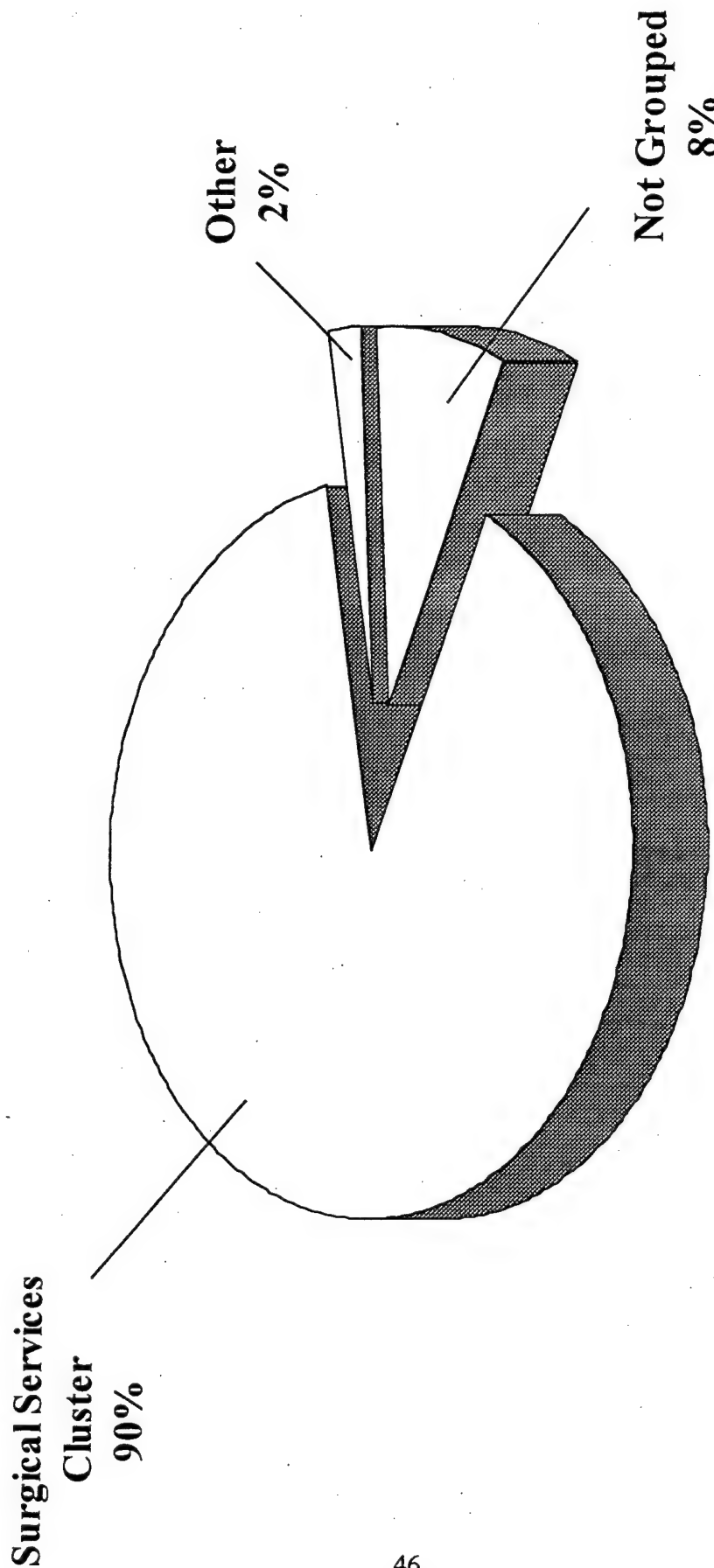
Training Emphasis (TE) and Task Difficulty (TD) Data

TE and TD data are secondary task factors that can help training development personnel decide which tasks to emphasize for entry-level training. These ratings, based on the judgments of senior career ladder NCOs, provide a rank-ordering of those tasks considered important for airmen with 1-48 months TAFMS training (TE) and a measure of the relative task difficulty (TD). When combined with data on the percentages of entry-level personnel performing tasks, comparisons can be made to determine if training adjustments are necessary. For example, tasks receiving high ratings on both task factors (TE and TD), accompanied by moderate to high percentages for performance may warrant resident training. Those tasks receiving high task factor ratings, but low percentages for performance, may be more appropriately planned for OJT programs within the career ladder. Low task factor ratings may highlight tasks best omitted from training for new personnel. These decisions must be weighed against percentages of personnel performing the tasks, command concerns, and criticality of the tasks.

To assist technical school personnel, AFOMS developed a computer program that incorporates these secondary factors and the percentage of 1-48 months TAFMS personnel performing tasks to produce an Automated Training Indicators (ATI) for each task. These indicators correspond to training decisions listed and defined in the Training Decision Logic Table found in Attachment 2, AETCI 36-2601, Occupational Analysis Program, and allows course personnel to quickly focus attention on those tasks which are most likely to qualify for resident course consideration.

Tasks having the highest TE ratings for AFSC 4N1X1 personnel with 1-48 months TAFMS are listed in Table 19. Included for each task are the percentages of 1-48 months TAFMS (1ST ENL) personnel performing each task and the TD ratings. As illustrated in the table, tasks with

4N1X1 FIRST ENLISTMENT PERSONNEL (N = 300)



*Other: CSS Tech
ORTHO Tech
ENT Tech
Surgical Logistics

FIGURE 6

TABLE 16

**RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES
BY FIRST-ENLISTMENT AFSC 4N1X1 PERSONNEL**

DUTIES	PERCENT TIME SPENT
A PERFORMING GENERAL CLINICAL ACTIVITIES	5
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	17
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES	2
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	32
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	7
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	11
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	7
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	8
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	*
J PERFORMING ORTHOPEDIC ACTIVITIES	1
K PERFORMING UROLOGY ACTIVITIES	*
L PERFORMING RESEARCH ACTIVITIES	*
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	3
N PERFORMING MEDICAL READINESS ACTIVITIES	3
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	2
P PERFORMING TRAINING ACTIVITIES	1

* Indicates less than 1 percent

NOTE: Time spent does not total 100 percent due to rounding

TABLE 17

**REPRESENTATIVE TASKS PERFORMED BY
FIRST-ENLISTMENT AFSC 4N1X1 PERSONNEL**

TASKS		PERCENT MEMBERS PERFORMING (N=300)
D0099	Arrange sterile instruments and supplies on back tables while scrubbed	92
D0133	Perform hand and arm scrubs	93
D0126	Establish sterile fields in OR while scrubbed	93
D0131	Pass instruments or supplies to operating team members using traditional techniques	90
D0134	Perform preliminary cleaning of soiled instruments prior to return to CSS	93
D0127	Identify and properly manage dirty instruments or contaminated field	93
D0124	Don or doff sterile gowns or gloves	92
G0189	Stock OR with sterile or nonsterile supplies	88
D0129	Label drugs or solutions within sterile field	93
D0121	Break down sterile fields while scrubbed	91
D0097	Adjust Mayo instrument tray stands while scrubbed	91
D0108	Assist physicians with general surgery procedures	86
D0118	Assist professional staff in donning or doffing sterile gowns or gloves while scrubbed	89
D0119	Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	93
D0132	Pass specimens to circulators	93
D0128	Identify drugs or solutions prior to accepting transfer to sterile field while scrubbed	91
D0136	Prepare and handle specimens while scrubbed	92
D0120	Assist surgeons in applying sterile drapes while scrubbed	91
D0123	Dispose of sterile gowns or gloves	90
E0150	Pull surgical supplies, instruments, or equipment	87
D0122	Correct breaks in sterile techniques by members of operating teams while scrubbed	90
E0143	Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	88
D0125	Don or doff surgical attire, other than sterile gowns or gloves, for operating room (OR) activities	87

Average number of tasks performed = 121

TABLE 18

**SPECIAL TOOLS OR EQUIPMENT USED OR OPERATED
BY AFSC 4N1X1 FIRST-ENLISTMENT PERSONNEL
(PERCENT MEMBERS RESPONDING)**

SPECIAL TOOLS/EQUIPMENT	1ST ENL (N=300)
Steam (Flash) Sterilizers	84
Electrical Control Operating (Surgical) Tables	80
Manual Control Operating (Surgical) Tables	79
Lead Vests	78
Laparoscopes and Accessories	77
Gravity Displacement Steam Sterilizers	75
Fiber Optic Light Sources	73
Hand Tables	73
Surgical Stapling Devices	71
Stationary Suction Units	70
Compressed Gas Tanks	69
Solution Warming Cabinets	68
Prevacuum High-Temperature Sterilizers	68
Arthoscopes and Accessories	65
Electrosurgical Units	64
Flexible Fiber Optic Endoscopes	64
Specialized Retractors	63
Sigmoidoscopes and Accessories	61
Cast Carts	58
Microscopic Instruments	58
Stationary Operating (Surgical) Tables	57
Blood Pressure Monitoring Equipment	53
Int & Ext Ortho Fracture Fixation Instruments	52
Colonoscopes and Accessories	51
Defibrillators	50
Rigid Endoscopes	49
Pulse Oxymeters	49
Heat Sealers	48
Orthopedic Fracture Tables and Accessories	46
Cystoscopes and Accessories	43
Doppler Units	38
Harmonic Scalpels	37
Nerve Stimulators	36
Bronchoscopes and Accessories	31
Powered Dermatomes	31
Obstetric/Delivery Room Tables	31
Intravenous (IV) Infusion Pumps	30
Lasers and Accessories	30

TABLE 19

EXAMPLES OF AFSC 4N1X1 TASKS WITH HIGHEST TRAINING EMPHASIS RATINGS

TASKS	TNG EMP*	PERCENT 1ST ENL PERFORM (N=300)	TSK DIF**
D0122 Correct breaks in sterile techniques by members of operating team s while scrubbed	8.19	90	4.71
D0126 Establish sterile fields in OR while scrubbed	8.19	94	4.7
D0128 Identify drugs or solutions prior to accepting transfer to sterile fields while scrubbed	8.04	91	4.63
D0129 Label drugs or solution within sterile field	7.93	93	4.41
D0127 Identify and properly manage dirty instruments or contaminated field	7.89	93	4.97
D0133 Perform hand and arm scrubs	7.89	93	4.02
E0143 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	7.78	88	4.28
D0124 Don or doff sterile gowns or gloves	7.74	92	4.14
D0131 Pass instruments or supplies to operating team members using traditional techniques	7.70	90	4.72
H0190 Establish patient identify prior to transport to surgery	7.70	80	3.87
F0160 Identity breaks in sterile techniques by members of operating teams while circulating	7.70	84	4.72
D0119 Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	7.59	89	4.58
D0130 Pass instruments or supplies to operating team members using hands-free technique	7.59	79	4.61
D0136 Prepare and handle specimens while scrubbed	7.59	92	4.60
D0118 Assist professional staff in donning or doffing sterile gowns or gloves while scrubbed	7.56	89	3.85
D0120 Assist surgeons in applying sterile drapes while scrubbed	7.56	91	4.44
E0142 Establish sterile fields in OR as circulator	7.52	82	4.45
B0069 Monitor CSS sterilizer effectiveness using chemical indicators	7.44	58	4.66
D0099 Arrange sterile instruments and supplies on back tables while scrubbed	7.44	92	4.50
F0156 Assist surgeons in applying sterile drapes while circulating	7.44	74	4.31

* Mean TE Rating is 3.13, Standard Deviation is 2.24 (High TE = 5.37)

** Average TD Rating is 5.00, Standard Deviation is 1.00

TABLE 20

AFSC 4N1X1 TASKS WITH HIGHEST TASK DIFFICULTY RATINGS

TASKS	TSK DIF*	PERCENT MEMBERS PERFORMING			TNG EMP*
		1ST ENL (N=300)	DAFSC 4N131 (N=213)	DAFSC 4N151 (N=320)	
D0109	7.08	23	26	17	4.04
D0107	6.96	15	15	17	3.78
D0116	6.84	36	31	27	4.33
J0245	6.68	3	2	2	.56
J0239	6.53	1	3	3	.70
L0312	6.51	0	0	2	.33
L0311	6.51	1	1	2	.33
D0139	6.51	55	55	51	5.52
D0113	6.49	77	79	67	6.56
J0258	6.44	2	2	2	.70
J0264	6.39	1	1	2	.48
P0469	6.36	2	2	10	1.22
training standards (STSs)					
J0271	6.35	1	1	2	.59
D0111	6.35	36	35	27	4.26
L0308	6.34	1	1	2	0
J0257	6.34	1	1	2	.67
J0259	6.33	2	3	2	.19
J0243	6.32	1	2	2	.19
M0328	6.31	4	5	18	2.78
L0313	6.30	0	0	1	.30
Perform hematocrit readings on research animals					

* Average TD Rating is 5.00, Standard Deviation = 1.00

** Mean TE Rating is 3.13, Standard Deviation is 2.24 (High TE = 5.37)

the highest TE ratings deal with sterile operating room activities, nonsterile preoperative operating room activities, central sterile supply activities, and nonsterile intraoperative operating room activities. These tasks are performed by high percentages of 1-48 months TAFMS personnel.

Table 20 lists the tasks having the highest TD ratings. The percentages of 1-48 months TAFMS, 3- and 5-skill level personnel performing, and TE ratings are also included for each task. Many of the tasks with the highest TD ratings involve highly technical tasks involving sterile operating room activities and orthopedic activities. Most are performed by low percentages of personnel.

Various lists of tasks, accompanied by TE and TD ratings, are contained in the **TRAINING EXTRACT** package and should be reviewed in detail by technical school personnel. For a more detailed explanation of TE and TD ratings, see Task Factor Administration in the **SURVEY METHODOLOGY** section of this report.

Specialty Training Standard (STS) Analysis

A comprehensive review of the AFSC 4N1X1 STS, dated April 1997, was made by comparing survey data to STS elements. To assist in the examination of the STS, technical school SMEs from the 383rd Training Squadron, Sheppard AFB TX, matched JI tasks to appropriate sections and subsections of the STS. Elements with performance objectives were reviewed in terms of TE, TD, and percent members performing information, using the guidance provided in AETC Instruction 36-2601 and AFI 36-2623. STS paragraphs containing general knowledge information, subject-matter knowledge requirements, or supervisory responsibilities were not reviewed. Typically, STS elements matched to tasks which have sufficiently high TE and TD ratings and are performed by at least 20 percent of personnel in appropriate experience of skill-level groups (such as first-enlistment (1-48) months TAFMS, and 5- and 7-skill level groups) should be considered for inclusion in the STS. Likewise, elements matched to tasks with less than 20 percent performing in all of these groups should be considered for deletion from the STS.

Using this standard approach, only 5 of the 4N1X1 STS paragraphs did not have matched tasks with at least 20 percent members performing when compared to the criterion groups mentioned above (see Table 21). Training personnel and SMEs should review these elements to determine if they warrant remaining in the STS.

Tasks not matched to any paragraph of the STS are listed at the end of the STS computer listing. Table 22 lists examples of tasks, which were performed by 20 percent or more of criterion groups, but not matched to any STS item. Most of these tasks are rated high in TE and TD and have high percent members performing. Training personnel and SMEs should review the tasks not referenced listing for possible inclusion in the STS.

TABLE 21

STS AFSC 4N1X1 ITEMS NOT SUPPORTED BY SURVEY DATA

STS ITEMS (WITH SELECTED MATCHED TASKS)	TNG EMP*	PERCENT MEMBERS PERFORMING				TSK DIF**
		1ST ENL (N=300)	DAFSC 4N131 (N=213)	DAFSC 4N151 (N=320)		
20.5.1. Catheterizations						
K0287 Catheterize urology patients	1.93	8	8	7	5.48	
20.5.8. Perform macrourethralysis						
K0295 Perform macroscopic urinalysis, such as dipsticking	.98	1	0	1	5.37	
21.2.1.1.1. Standard short arm						
J0273 Apply standard short arm plaster or fiberglass casts	1.07	2	3	3	5.77	
21.2.1.1.4. Standard long arm						
J0272 Apply standard long arm plaster or fiberglass casts	1.07	2	1	3	6.06	
22.3.1 Hilger nerve stimulation						
I0219 Perform Hilger nerve stimulation	.44	1	1	2	5.83	

* Mean TE Rating is 3.13, Standard Deviation is 2.24 (High TE = 5.37)

** Average TD rating is 5.00, Standard Deviation is 1.00

TABLE 22

EXAMPLES OF TECHNICAL TASKS PERFORMED BY 20 PERCENT OR MORE AFSC 4N1X1 GROUP MEMBERS
AND NOT REFERENCED TO THE STS
(PERCENT MEMBERS PERFORMING)

TASKS	PERCENT MBRS PERFORMING				TSK DIF**
	IST	DAFSC	DAFSC	TNG	
	ENL (N=300)	4N131 (N=213)	4N151 (N=320)	EMP*	
D0097	91	90	80	5.93	2.92
D0102	86	86	76	6.44	5.66
D0108	86	86	76	7.00	5.72
D0120	91	91	81	7.56	4.44
D0126	94	93	92	8.19	4.70
D0127	93	92	81	7.89	4.97
D0128	91	90	80	8.04	4.63
D0129	93	91	80	7.93	4.41
D0129	93	91	80	7.93	4.41
D0130	79	80	70	7.59	4.61
D0134	93	91	82	7.26	4.03
D0135	89	89	76	6.22	4.85
D0136	92	92	80	7.59	4.60
E0142	82	81	73	7.52	4.45
G0175	81	82	73	6.56	3.82

* Mean TE Rating is 3.13, Standard Deviation is 2.24 (High TE = 5.37)

** Average TD rating is 5.00, Standard Deviation is 1.00

Plan of Instruction (POI) Analysis

JI tasks were matched to related training objectives for the " entry level courses, with assistance from the 383rd Training Squadron SMEs. The method employed was similar to that of the STS percent members performing data for first-enlistment (1-48 months TAFMS) personnel, and TE and TD ratings.

POI blocks, units of instruction, and criterion objectives were compared using the standard set forth in AETC Instruction 36-2601. (30 percent or more of the first-enlistment personnel performing tasks trained, along with sufficiently high TE and TD ratings on those tasks). In accordance with this guidance, tasks trained in the course not meeting these criteria should be considered for elimination from formal course training if not justified on some other acceptable basis.

The results of the review of the POI follows:

J3AQR4N131-002 Surgical Services Apprentice, dated 10 July 1998. Only three of the POI performance-coded learning objectives in this course are not supported by survey data. Table 23 lists these proficiency-coded elements. Objectives II.1.a, II.1.d, and II.2.a should be reviewed by training personnel for possible deletion from this course.

Table 24 displays examples of tasks not referenced to POI *J3AQR4N131-002*. In addition to having high percentage of members performing, some of them have high TE and TD ratings. SMEs and training personnel should review these tasks and others rated high in TE, TD, and percent members performing for possible inclusion in the POI.

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. Questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions were included in survey booklets to provide indications of job satisfaction.

Table 25 compares first-enlistment (1-48 months TAFMS), second-enlistment (49-96 months TAFMS), and career (97+ months TAFMS) group data to corresponding enlistment groups from other Medical AFSCs surveyed in 1997. These data can give a relative measure of how the job satisfaction of AFSC 4N1X1 personnel compares with similar Air Force specialties. Review of Table 25 reflects responses for AFSC 4N1X1 TAFMS groups regarding job interest, use of training, reenlistment intentions, and sense of accomplishment gained from work are all positive (75 percent or more).

The first-enlistment group rated higher job satisfaction in all areas except reenlistment intentions. Second-enlistment group members rated job interest, perceived utilization of training,

TABLE 23

EXAMPLES OF POI J3AQR4N131 ITEMS NOT SUPPORTED BY SURVEY DATA

TASKS	TNG EMP*	IST ENL PERF (N=300)	TSK DIF**
II.1.a. Identify basic facts and terms related to quality improvement and risk management with at least 70% accuracy			
O442 Participate in customer satisfaction programs	2.85	8	4.50
O443 Participate in QI programs	3.00	12	4.65
II.1.d. Identify basic facts and terms related to professional and patient relationships with at least 70% accuracy			
O442 Participate in customer satisfaction programs	2.85	8	4.51
II.2.a Identify basic facts and terms associated with property accountability and responsibility related to medical logistics with at least 70% accuracy			
M340 Order medical supplies from USAF agencies, other than pharmacy or linen supplies	4.11	13	5.06
M341 Order medical supplies using local purchase procedures	4.15	13	5.09
M342 Order nonmedical supplies from USAF supply agencies	3.78	10	4.65
M346 Perform periodic inventories of equipment or supplies, other than dated medication	3.89	20	4.49
M349 Receive supplies from medical logistics	4.41	23	4.01
M353 Review using activity issue/turn-in lists	4.22	7	4.76

* Mean TE Rating is 3.13, Standard Deviation is 2.24 (High TE = 5.37)

** Average TD rating is 5.00, Standard Deviation is 1.00

TABLE 24

EXAMPLES OF TECHNICAL TASKS PERFORMED BY 30 PERCENT OR MORE FIRST-ENLISTMENT PERSONNEL
AND NOT REFERENCED TO THE 4N1X1 AFSC POI

TASKS	TNG EMP*	PERCENT 1ST ENLIST		TSK DIF**
		PERF (N=300)		
D0098 Adjust overhead operating lights while scrubbed	5.81	89		2.84
D0102 Assist physicians with laparoscopic procedures	6.44	86		5.66
D0108 Assist physicians with general surgery procedures	7.00	86		5.72
D0110 Assist physicians with obstetrics/gynecology (OB/GYN)	6.37	78		5.78
D0113 Assist physicians with orthopedic surgery procedures	6.56	77		6.49
D0127 Identify and properly manage dirty instruments or contaminated field	7.89	93		4.97
D0130 Pass instruments or supplies to operating team members using hands-free technique	7.59	79		4.61
D0134 Perform preliminary cleaning of soiled instruments prior to return to CSS	7.26	93		4.03
D0135 Perform sterile draping of surgical equipment, such as microscopes or x-ray units	6.22	89		4.85
D0137 Prepare and handle surgical implants while scrubbed	7.41	78		4.98
F0154 Assist professional staff in performing blood loss counts, such as sponge weight or suction monitoring	5.96	55		5.19
F0163 Position sterile tables or related equipment, such as monitors, microscopes, or lasers	6.41	79		4.63
G0176 Change compressed medical gas tanks on OR equipment	5.93	57		4.51
G0179 Dispose of blood or blood byproducts	6.85	74		3.92
H0196 Retrieve blood from blood banks	5.93	58		4.70
H0198 Retrieve equipment or supplies for surgery from outside surgical suite	4.52	71		4.09
H0202 Transport surgical specimens to laboratories	6.00	85		3.64
H0203 Transport frozen sections to laboratories	5.93	81		4.20

* Mean TE Rating is 3.13, Standard Deviation is 2.24 (High TE = 5.37)

** Average TD rating is 5.00, Standard Deviation is 1.00

TABLE 25

COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 4N1X1
TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE
(PERCENT MEMBERS RESPONDING)

	1-48 MONTHS TAFMS		49-96 MONTHS		97+ MONTHS	
	4N1X1 (N=300)	COMP SAMPLE (N=711)	4N1X1 (N=154)	COMP SAMPLE (N=446)	4N1X1 (N=310)	COMP SAMPLE (N=1018)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	84	70	78	76	78	81
SO-SO	8	18	12	15	15	13
DULL	8	12	10	9	7	6
<u>PERCEIVED USE OF TALENTS</u>						
FAIRLY WELL TO PERFECT	87	78	84	84	84	88
LITTLE OR NOT AT ALL	13	22	16	16	16	12
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	91	93	85	92	83	89
LITTLE OR NOT AT ALL	9	7	15	8	17	11
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
SATISFIED	77	71	76	75	84	78
NEUTRAL	10	14	8	14	16	8
DISSATISFIED	13	15	16	11	0	14
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	42	52	51	64	70	71
NO OR PROBABLY NO	58	49	47	35	20	10
WILL RETIRE	0	0	2	1	10	19

NOTE: Comparative data are from Medical AFSCs surveyed in 1997

and reenlistment intentions similar to their comparison counterparts. The sense of accomplishment from the job with second-enlistment personnel was the lowest in comparison to the comparative sample. Reenlistment intentions increased from first-enlistment personnel with the highest probabilities of reenlistment in the career group. Review of the job satisfaction data reveals generally positive response in the five job satisfaction indicators across TAFMS groups.

IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted primarily to ensure current data for use in evaluating the effectiveness of training within the Surgical Services specialty. The data compiled from this survey shows that the "Slick" personnel follow a typical career progression pattern. The present classification structure, as described in AFMAN 36-2108 *Airman Classification*, accurately portrays the jobs in this study.

Analysis of career ladder documents indicates several areas of both the STS and POI are unsupported by survey data. Both documents should be reviewed by career field functional managers and technical training SMEs.

Job satisfaction data indicate first-enlistment AFSC 4N1X1 personnel are more satisfied with their jobs than the comparative sample in all areas except reenlistment intentions. No serious job satisfaction problems appear to exist in the remainder of the TAFMS groups.

The findings of this OSR come directly from survey data collected from AFSC 4N1X1 personnel worldwide.

PART TWO

AFSC 4N1X1B

Analysis of DAFSC Groups

The distribution of AFSC 4N1X1B skill-level groups across the career ladder specialty jobs is displayed in Table 26. As expected, the highest concentration of "B" shred members is in the Urology Technician Job. The Urology Technician Job is the core job of the AFSC 4N1X1B. As personnel progress through the career ladder, they begin to move into traditional management and supervisory roles, as indicated by the higher percentage of 7-skill level personnel found in the Supervisory and Management Job.

Table 27 offers another perspective by displaying the relative percent time spent on each duty across skill-level groups. As expected, 3- and 5-skill level members are equally involved in performing general clinic activities and performing sterile operating room activities. Seven-skill level members are still performing the core work in addition to performing variety of supervisory, administrative, logistics, and management duties. Specific skill-level group discussions are presented below.

Skill-Level Descriptions

DAFSC 4N131B. The two 3-skill level personnel in this shred, represent less than 1 percent of the survey sample, perform an average of 165 tasks. Table 26 shows that 100 percent of this group work in the Urology Technician Job. Twenty-five percent of their job time is spent performing general clinical activities (see Table 27). Table 28 lists representative tasks these members perform, demonstrating the basic technical nature of their work.

DAFSC 4N151B. The 16 members at the 5-skill level, representing 2 percent of the survey sample, perform an average of 165 tasks. Table 26 shows that the Urology Technician Job is the core job of the 5-skill personnel. DAFSC 4N151B individuals spend 26 percent of their time performing general clinical activities and 20 percent performing sterile operating room activities (see Table 27). Table 29 lists representative tasks for these incumbents. What distinguishes 5-skill level personnel from 3-skill level personnel is that a slightly higher percentage of 5-skill level personnel perform basic supervisory functions (see Table 30).

DAFSC 4N171B. The 10 members in this group perform an average of 171 tasks, the most of any DAFSC group. Unlike the 3- and 5-skill level groups, 41 percent of their job time is spent on supervisory, training, and administrative tasks pertaining to Duties M through P (see Table 27). The largest percent of the members work in the Urology Technician Job (see Table 26).

TABLE 26

DISTRIBUTION OF AFSC 4N1X1B SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)

<u>SPECIALTY JOBS</u>		DAFSC 4N131B (N=2)	DAFSC 4N151B (N=16)	DAFSC 4N171B (N=16)
I.	SURGICAL SERVICES CLUSTER	0	0	0
	A. Entry Level Operating Room Technician Job	0	0	0
	B. Operating Room Technician Job	0	0	0
	C. Phase II Instructor	0	0	0
II.	CENTRAL STERILE SUPPLY (CSS) TECHNICIAN JOB	0	0	0
III.	OTORHINOLARYNGOLOGY (ENT) TECHNICIAN JOB	0	0	0
IV.	UROLOGY TECHNICIAN JOB	100	94	80
V.	ORTHOPEDIC TECHNICIAN JOB	0	0	0
VI.	CLINIC NCOIC JOB	0	0	0
VII.	SURGICAL LOGISTICS JOB	0	0	0
VIII.	SUPERVISORY AND MANAGEMENT JOB	0	0	20
IX.	SUPERINTENDENT JOB	0	0	0
X.	NOT GROUPED	0	6	0

TABLE 27

**TIME SPENT ON DUTIES BY AFSC 4N1X1B SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)**

DUTIES	DAFSC 4N131B (N=2)	DAFSC 4N151B (N=16)	DAFSC 4N171B (N=10)
A PERFORMING GENERAL CLINICAL ACTIVITIES	25	26	20
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	4	3	3
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES	*	*	*
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	21	20	16
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	4	3	3
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	7	8	6
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	3	3	1
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	2	2	1
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	0	0	*
J PERFORMING ORTHOPEDIC ACTIVITIES	0	0	*
K PERFORMING UROLOGY ACTIVITIES	8	10	8
L PERFORMING RESEARCH ACTIVITIES	0	*	
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	13	12	11
N PERFORMING MEDICAL READINESS ACTIVITIES	2	2	2
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	7	8	23
P PERFORMING TRAINING ACTIVITIES	3	2	5

* Indicates less than 1 percent

TABLE 28
REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N131B PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=2)
K0286 Assist physicians with urology procedures in clinic	100
A0044 Schedule clinic patients' appointments	100
A0002 Answer appointment telephone lines	100
D0115 Assist physicians with urological surgery procedures	100
A0009 Contact new patients for appointments	100
A0004 Assist physicians in noninvasive physical examinations	100
A0027 Prepare patients for clinic examinations	100
A0030 Prepare sterile setups for clinic procedures	100
K0293 Instill xylocaine jellies intraurethrally	100
K0288 Collect catheterized urine specimens	100
M0341 Order medical supplies using local purchase procedures	100
M0323 Coordinate standard medical supply purchases with medical materiel	100
M0322 Coordinate equipment purchases with medical materiel	100
K0287 Catheterize urology patients	100
D0100 Assist physicians with endoscopic procedures	100
K0298 Perform urodynamic tests, such as cystometrograms or urine flow	100
M0349 Receive supplies from medical logistics	100
B0052 Clean instruments or equipment for storage or reprocessing	100
A0026 Prepare accessory equipment, such as lamps, for clinic procedures	100
O0436 Log procedures into record books or computers	100
D0121 Break down sterile fields while scrubbed	100
D0103 Assist physicians with microscopic procedures	100
D0133 Perform hand and arm scrubs	100
D0119 Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	100
A0043 Schedule patients for surgery	100

Average number of tasks performed = 165

TABLE 29
REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N151B PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=16)
A0031 Prepare and drape patients for clinic procedures	100
A0002 Answer appointment telephone lines	100
D0115 Assist physicians with urological surgery procedures	100
A0044 Schedule clinic patients' appointments	100
A0030 Prepare sterile setups for clinic procedures	100
A0027 Prepare patients for clinic examinations	100
K0293 Instill xylocaine jellies intraurethrally	100
K0287 Catheterize urology patients	100
K0288 Collect catheterized urine specimens	100
A0026 Prepare accessory equipment, such as lamps, for clinic procedures	100
A0038 Return clinic patients' health records	100
A0017 Inspect clinic equipment or instruments for cleanliness	100
F0161 Perform surgical skin cleansings	100
K0300 Prepare contrast media for urologic procedures	100
A0005 Brief patients on clinical policies	100
A0040 Review expiration dates on clinics' sterile instruments, supplies, or drugs	100
A0039 Return unused supplies to storage areas in clinic	100
G0180 Doff personal protective attire	100
K0286 Assist physicians with urology procedures in clinic	94
D0100 Assist physicians with endoscopic procedures	94
A0022 Obtain clinic patients' health records	94
K0289 Collect clean catch urine specimens	94
D0126 Establish sterile fields in OR while scrubbed	94
A0015 Establish patient identity/eligibility for services (DEERS)	94
A0008 Chaperone during examinations	94

Average number of tasks performed = 165

TABLE 30

**TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4N131B AND DAFSC 4N151B PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 4N131B (N=2)	DAFSC 4N151B (N=16)	DIFFERENCE
O0434 Interpret policies, directives, or procedures for subordinates	100	19	81
E0145 Perform initial or between-case cleaning of OR	100	25	75
E0141 Disinfect inanimate objects in OR	100	25	75
O0426 Identify and report suspected security compromises	100	25	75
O0422 Evaluate personnel for compliance with performance standards	100	31	69
B0066 Maintain sterilizer monitoring records	100	31	69
E0149 Prepare formalin containers for surgical specimens	100	38	63
E0144 Perform initial or between-case cleaning of equipment	100	38	63
P0478 Maintain training records or files	100	38	63
H0202 Transport surgical specimens to laboratories	100	38	63
<hr/>			
K0301 Set techniques for urologic x-ray exposures	*	81	-81
K0299 Perform urographic procedures	*	81	-81
K0302 Shoot kidney-ureter-bladder (KUB) x-rays	*	81	-81
O0405 Destroy Privacy Act materials or documents	*	75	-75
O0397 Conduct self-inspections or self-assessments	*	69	-69
K0296 Perform microscopic urinalysis	*	63	-63
K0297 Perform minor maintenance on x-ray equipment	*	56	-56
A0038 Return clinic patients' health records	50	100	-50
M0330 Evaluate maintenance or utilization of equipment, tools, parts, supplies, or workspace	*	50	-50
K0300 Prepare contrast media for urologic procedures	50	100	-50

TABLE 31
REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N171B PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=10)
K0286 Assist physicians with urology procedures in clinic	100
A0002 Answer appointment telephone lines	100
K0293 Instill xylocaine jellies intraurethrally	100
K0287 Catheterize urology patients	100
A0004 Assist physicians in noninvasive physical examinations	100
A0030 Prepare sterile setups for clinic procedures	100
O0419 Establish performance standards for subordinates	100
A0031 Prepare and drape patients for clinic procedures	100
A0013 Don or doff surgical attire in clinic	100
K0300 Prepare contrast media for urologic procedures	100
A0017 Inspect clinic equipment or instruments for cleanliness	100
A0040 Review expiration dates on clinics' sterile instruments, supplies, or drugs	100
A0039 Return unused supplies to storage areas in clinic	100
A0044 Schedule clinic patients' appointments	90
O0457 Write or indorse military performance reports	90
O0399 Conduct supervisory performance feedback sessions	90
K0288 Collect catheterized urine specimens	90
O0433 Inspect personnel for compliance with military standards	90
O0422 Evaluate personnel for compliance with performance standards	90
A0003 Answer patient medical inquiries	90
O0404 Counsel subordinates concerning personal matters	90
A0027 Prepare patients for clinic examinations	90
A0045 Screen clinic patients' vital signs	90
K0289 Collect clean catch urine specimens	90
A0006 Brief physicians on patient followups	90

Average number of tasks performed = 171

TABLE 32

**TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4N151B AND DAFSC 4N171B PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 4N151B (N=16)	DAFSC 4N171B (N=10)	DIFFERENCE
F0169 Prepare patients for intraoperative x-rays	88	30	58
G0179 Dispose of blood or blood byproducts	63	10	53
K0294 Label urologic x-ray films	81	30	51
F0161 Perform surgical skin cleansings	100	50	50
D0130 Pass instruments or supplies to operating team members using hands-free technique	88	40	48
D0103 Assist physicians with microscopic procedures	81	40	41
G0180 Doff personal protective attire	100	60	40
K0291 File urologic x-ray films	69	30	39
K0292 Inject contrast media intraurethally	88	50	38
A0034 Remove drains from clinic patients	88	50	38
O0419 Establish performance standards for subordinates	25	100	-75
O0423 Evaluate personnel for promotion, demotion, reclassification, or special awards	13	80	-68
O0404 Counsel subordinates concerning personal matters	25	90	-65
O0401 Conduct supervisory orientations for newly assigned personnel	19	80	-61
O0434 Interpret policies, directives, or procedures for subordinates	19	80	-61
O0433 Inspect personnel for compliance with military standards	31	90	-59
O0399 Conduct supervisory performance feedback sessions	31	90	-59
O0457 Write or indorse military performance reports	31	90	-59
O0422 Evaluate personnel for compliance with performance standards	31	90	-59
O0458 Write recommendations for awards or decorations	25	80	-55

In general, a great deal of diversity is not seen in the work performed at this skill level. As shown in Table 27, many commonly performed tasks are performed by high percentages of personnel. Table 32 shows tasks, which best distinguish between 5- and 7-skill level members. A higher percentage of 7-skill level members perform typical supervisory tasks, reflecting a first-line supervisory role for these more senior personnel. Examples of tasks with the greatest difference in members performing include: establishing performance standards for subordinates, evaluating personnel for promotion, demotion, reclassification, or special awards, counseling subordinates concerning personal matters, and conducting supervisory orientations for newly assigned personnel.

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. Therefore, the survey booklet included attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions. The responses of the current survey sample were analyzed by making comparisons among TAFMS groups of the AFSC 4N1X1B career ladders and a comparative sample of personnel from other Medical AFSCs surveyed in 1997.

Table 33 compares "B" shred second-enlistment (49-96 months TAFMS), and career (97+ months TAFMS) group data to corresponding enlistment groups from other Medical AFSCs surveyed in 1997. These data give a relative measure of how the job satisfaction of AFSC 4N1X1B personnel compares with similar Air Force specialties. Urology personnel reported slightly lower job satisfaction figures than members of the comparative sample.

The second-enlistment and career groups rated slightly lower job satisfaction in all areas except perceived use of talents. Expressed job interest with career personnel was the lowest in comparison to other medical groups and second enlistment personnel. Reenlistment intentions increased from second-enlistment personnel with the highest probabilities of reenlistment in the career group (97+ months TAFMS). The percentage of positive responses in these comparisons reflect a career ladder where personnel appear to be satisfied with their jobs.

TABLE 33

**COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 4N1X1B
TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE
(PERCENT MEMBERS RESPONDING)**

	49-96 MONTHS		97+ MONTHS	
	4N1X1B (N=7)	COMP SAMPLE (N=446)	4N1X1B (N=21)	COMP SAMPLE (N=1018)
<u>EXPRESSED JOB INTEREST</u>				
INTERESTING	72	76	67	81
SO-SO	14	15	23	13
DULL	14	9	10	6
<u>PERCEIVED USE OF TALENTS</u>				
FAIRLY WELL TO PERFECTLY	100	84	86	88
LITTLE OR NOT AT ALL	0	16	14	12
<u>PERCEIVED USE OF TRAINING</u>				
FAIRLY WELL TO PERFECTLY	85	92	81	89
LITTLE OR NOT AT ALL	15	8	19	11
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>				
SATISFIED	72	75	71	78
NEUTRAL	14	14	5	8
DISSATISFIED	14	11	24	14
<u>REENLISTMENT INTENTIONS</u>				
YES OR PROBABLY YES	57	64	67	71
NO OR PROBABLY NO	43	35	14	10
WILL RETIRE	0	1	19	19

NOTE: Comparative data are from the Medical AFSCs surveyed in 1997

IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted primarily to ensure current data for use in evaluating the effectiveness of training within the Surgical Services specialty. "B" shred data compiled from this survey show current members follow a typical career progression pattern. The present classification structure, as described in AFMAN 36-2108 *Airman Classification*, accurately portrays the "B" shred jobs in this study.

Job satisfaction data indicate second-enlistment AFSC 4N1X1B personnel are slightly less satisfied with their jobs than the comparative sample in all areas except second-enlistment personnel perceived use of talents. No serious job satisfaction problems appear to exist in the "B" shred members.

The findings of this OSR come directly from survey data collected from AFSC 4N1X1B personnel worldwide.

PART THREE

AFSC 4N1X1C

Analysis of DAFSC Groups

Table 34 displays the distribution of the AFSC 4N1X1C skill level groups across career ladder clusters and jobs. As expected, almost all "C" shred personnel perform jobs pertaining to clinical and orthopedic activities. The Orthopedic Technician Job and Clinic NCOIC Job are core to the "C" shred. As personnel progress in the career ladder, they begin to move into a supervisory role, as indicated by the higher percentage of 7-skill level personnel found in the Clinic NCOIC Job.

Table 35 offers another perspective by displaying the relative percent time spent on each duty across skill-level groups. Three- and 5-skill level members spend more time performing general clinical activities (Duty A) and performing orthopedic activities (Duty J). Seven-skill level personnel also spend a majority of their time performing clinical activities and orthopedic activities but there is a very distinct move towards performing administrative and management activities (Duty O). Twenty-three percent of their time is devoted to this area. Discussed below are specific skill-level descriptions.

Skill-Level Descriptions

DAFSC 4N131C. The 6 members of this group perform an average of 134 tasks. They have an average paygrade of E-4. Table 34 shows that 67 percent of this group work in the Clinic NCOIC Job and 33 percent in the Orthopedic Job. They spend 54 percent of their time performing general clinical activities and orthopedic activities (see Table 35). Table 36 shows these members performing tasks such as scheduling clinic patients' appointments, removing splints, preparing patients for removal of casts or splints, removing casts, assisting physicians with orthopedic surgical procedures in clinic and applying standard long arm plaster or fiberglass casts.

DAFSC 4N151C. The five-skill level members of this shred represent 7 percent of the survey sample and perform an average of 161 tasks. Table 34 shows that 71 percent of the 56 members in this group work in the Clinic NCOIC Job and 23 percent work in the Orthopedic Technician Job. Like their 3-skill level counterparts, they spend the majority of their job time (49 percent) performing general clinical activities and orthopedic activities (see Table 35). Table 37 lists representative tasks performed by these members. DAFSC 4N151C skill-level members perform many of the same technical tasks as their 3-skill level counterparts. The primary difference between the two groups is an increase in supervisory tasks performed by DAFSC 4N151C group members (see Table 38).

DAFSC 4N171C. Seven-skill level personnel average almost 10 years in the career ladder and perform an average of 228 tasks. Although most of their job time is involved with performing

TABLE 34

**DISTRIBUTION OF AFSC 4N1X1C SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)**

<u>SPECIALTY JOBS</u>	DAFSC 4N131C (N=6)	DAFSC 4N151C (N=56)	DAFSC 4N171C (N=16)
I. SURGICAL SERVICES CLUSTER	0	2	0
A. Entry Level Operating Room Technician Job	0	0	0
B. Operating Room Technician Job	0	0	0
C. Phase II Instructor	0	2	0
II. CENTRAL STERILE SUPPLY (CSS) TECHNICIAN JOB	0	0	0
III. OTORHINOLARYNGOLOGY (ENT) TECHNICIAN JOB	0	0	0
IV. UROLOGY TECHNICIAN JOB	0	0	0
V. ORTHOPEDIC TECHNICIAN JOB	33	23	6
VI. CLINIC NCOIC JOB	67	71	88
VII. SURGICAL LOGISTICS JOB	0	0	0
VIII. SUPERVISORY AND MANAGEMENT JOB	0	0	0
IX. SUPERINTENDENT JOB	0	0	0
X. NOT GROUPED	0	4	6

TABLE 35

**TIME SPENT ON DUTIES BY MEMBERS OF AFSC 4N1X1C SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)**

DUTIES	DAFSC 4N131C (N=6)	DAFSC 4N151C (N=56)	DAFSC 4N171C (N=16)
A PERFORMING GENERAL CLINICAL ACTIVITIES	25	26	20
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	*	2	1
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES	*	*	*
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	8	10	9
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	1	2	2
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	4	5	4
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	1	2	1
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	*	2	1
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	0	*	*
J PERFORMING ORTHOPEDIC ACTIVITIES	29	23	17
K PERFORMING UROLOGY ACTIVITIES	0	*	*
L PERFORMING RESEARCH ACTIVITIES	*	*	0
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	10	11	12
N PERFORMING MEDICAL READINESS ACTIVITIES	3	3	3
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	16	11	23
P PERFORMING TRAINING ACTIVITIES	1	3	6

* Indicates less than 1 percent

TABLE 36

**REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N131C PERSONNEL**

TASKS	PERCENT MEMBERS PERFORMING (N=6)
A0044 Schedule clinic patients' appointments	100
J0285 Remove splints	100
J0282 Prepare patients for removal of casts or splints	100
J0284 Remove casts	100
J0277 Assist physicians with orthopedic surgical procedures in clinic	100
J0272 Apply standard long arm plaster or fiberglass casts	100
J0273 Apply standard short arm plaster or fiberglass casts	100
J0269 Apply short leg plaster or fiberglass casts	100
J0270 Apply short leg plaster or fiberglass splints	100
J0266 Apply short arm scaphoid plaster or fiberglass splints	100
J0249 Apply long arm scaphoid plaster or fiberglass splints	100
J0253 Apply long leg plaster or fiberglass casts, other than cylinder	100
J0252 Apply long leg cylinder plaster or fiberglass casts	100
A0036 Remove sutures from clinic patients	100
A0037 Remove and dispose of sharps in clinic	100
A0035 Remove skin staples from clinic patients	100
A0027 Prepare patients for clinic examinations	100
J0267 Apply short arm sugar tong plaster or fiberglass splints	100
J0250 Apply long arm sugar tong plaster or fiberglass splints	100
J0246 Apply long arm cylinder plaster or fiberglass casts	100
A0040 Review expiration dates on clinics' sterile instruments, supplies, or drugs	100
A0002 Answer appointment telephone lines	83
A0009 Contact new patients for appointments	83
J0279 Assist physicians with closed reduction of fractures	83
A0023 Order x-rays	83

Average number of tasks performed = 134

TABLE 37
REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N151C

TASKS		PERCENT MEMBERS PERFORMING (N=56)
J0285	Remove splints	100
J0284	Remove casts	100
J0282	Prepare patients for removal of casts or splints	100
A0036	Remove sutures from clinic patients	100
J0250	Apply long arm sugar tong plaster or fiberglass splints	100
A0023	Order x-rays	98
J0269	Apply short leg plaster or fiberglass casts	98
A0027	Prepare patients for clinic examinations	98
J0270	Apply short leg plaster or fiberglass splints	98
J0272	Apply standard long arm plaster or fiberglass casts	98
A0007	Change dressings or packs in clinic	98
A0035	Remove skin staples from clinic patients	98
A0037	Remove and dispose of sharps in clinic	98
J0279	Assist physicians with closed reduction of fractures	98
A0039	Return unused supplies to storage areas in clinic	98
A0040	Review expiration dates on clinics' sterile instruments, supplies, or drugs	98
A0044	Schedule clinic patients' appointments	96
J0273	Apply standard short arm plaster or fiberglass casts	96
J0277	Assist physicians with orthopedic surgical procedures in clinic	96
J0267	Apply short arm sugar tong plaster or fiberglass splints	96
J0249	Apply long arm scaphoid plaster or fiberglass splints	96
J0251	Apply long arm plaster or fiberglass splints, other than scaphoid or sugar tong	96
J0253	Apply long leg plaster or fiberglass casts, other than cylinder	96
J0254	Apply long leg plaster or fiberglass splints	96
A0041	Review patients' health records prior to appointments or surgery	95

Average number of tasks performed = 161

TABLE 38

**TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4N131C AND 4N151C PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 4N131C (N=6)	DAFSC 4N151C (N=56)	DIFFERENCE
N0359 Assemble or disassemble OR equipment, instruments, or supplies for air transportable hospitals (ATHs)	83	36	48
N0357 Assemble surgical tents	83	39	44
O0395 Complete accident or incident reports	83	39	44
N0358 Assemble temper tents	83	43	40
N0388 Transfer litter patients under field conditions	83	45	39
O0402 Consult daily assignment sheets	67	32	35
J0274 Apply Thomas leg splint and Pearson attachment traction devices	67	36	31
F0166 Prepare forms for tissue examinations	50	20	30
J0283 Prepare patients for traction applications	83	55	28
O0400 Conduct safety inspections of equipment or facilities	67	39	27
<hr/>			
A0022 Obtain clinic patients' health records	33	89	-56
A0018 Instruct patients in filling out forms, such as patient histories or consent forms	33	77	-43
O0438 Maintain daily patient logs	*	41	-41
A0010 Coordinate intra- or inter-hospital appointments for outpatient consultations with other medical facilities	17	55	-39
P0478 Maintain training records or files	*	39	-39
O0450 Sort or file daily administrative distribution	*	39	-39
A0032 Prepare or distribute daily clinic schedules	50	86	-36
A0043 Schedule patients for surgery	33	70	-36
H0195 Position or transport patients on wheelchairs	*	34	-34

TABLE 39

**REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N171C PERSONNEL**

TASKS		PERCENT MEMBERS PERFORMING (N=16)
A0044	Schedule clinic patients' appointments	100
A0002	Answer appointment telephone lines	100
J0273	Apply standard short arm plaster or fiberglass casts	100
J0284	Remove casts	100
J0269	Apply short leg plaster or fiberglass casts	100
J0285	Remove splints	100
A0042	Review SFs 513 (Medical Record - Consultation Sheet)	100
J0270	Apply short leg plaster or fiberglass splints	100
A0023	Order x-rays	100
J0282	Prepare patients for removal of casts or splints	100
J0268	Apply short arm plaster or fiberglass splints, other than scaphoid or sugar tong	100
J0281	Instruct patients in use of orthopedic appliances	100
J0277	Assist physicians with orthopedic surgical procedures in clinic	100
J0251	Apply long arm plaster or fiberglass splints, other than scaphoid or sugar tong	100
J0267	Apply short arm sugar tong plaster or fiberglass splints	100
A0036	Remove sutures from clinic patients	100
A0005	Brief patients on clinical policies	100
A0037	Remove and dispose of sharps in clinic	100
A0035	Remove skin staples from clinic patients	100
J0254	Apply long leg plaster or fiberglass splints	100
O0405	Destroy Privacy Act materials or documents	100
O0396	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	100
J0252	Apply long leg cylinder plaster or fiberglass casts	100
O0421	Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	100
A0009	Contact new patients for appointments	94

Average number of tasks performed = 228

TABLE 40

**TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4N151C AND DAFSC 4N171C PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 4N151C (N=56)	DAFSC 4N171C (N=16)	DIFFERENCE
P0468 Determine training requirements	23	94	-71
O0434 Interpret policies, directives, or procedures for subordinates	27	94	-67
O0420 Evaluate inspection report findings or inspection procedures	21	88	-66
P0461 Brief personnel concerning training programs or matters	21	88	-66
O0458 Write recommendations for awards or decorations	29	94	-65
O0391 Assign sponsors for newly assigned personnel	23	88	-64
O0396 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	38	100	-63
O0425 Evaluate customer satisfaction programs	18	81	-63
O0457 Write or indorse military performance reports	30	94	-63
O0427 Implement safety or security programs	32	94	-62
O0459 Write replies to inspection reports	14	75	-61
O0453 Write job or position descriptions	34	94	-60
O0421 Evaluate job hazards or compliance with Air Force Occupational Safety and Health (AFOSH) program	41	100	-59
O0441 Maintain or update status indicators, such as boards, graphs, or charts	16	75	-59
O0455 Write minutes of briefings, conferences, or meetings	16	75	-59
O0404 Counsel subordinates concerning personal matters	36	94	-58
O0390 Assign personnel to work areas or duty positions	36	94	-58
O0449 Schedule personnel for TDY assignments, leaves, or passes	30	88	-57
O0401 Conduct supervisory orientations for newly assigned personnel	32	88	-55
P0479 Monitor trainee progress in 5-level career development courses (CDCs)	20	75	-55
O0407 Develop organizational or functional charts	9	63	-54

supervisory duties, they indicate spending some time performing technical tasks (see Table 35). Representative tasks performed by members of this group are listed in Table 39.

Tasks which best distinguish DAFSC 4N171C personnel from 5-skill level members are shown in Table 40. Seven-skill level members show a distinct increase in the amount of supervisory and management tasks performed. Examples of tasks with the greatest difference in members performing include determining training requirements, interpreting policies, directives, or procedures for subordinates, evaluating inspection report findings or inspection procedures, briefing personnel concerning training programs or matters, writing recommendations for awards or decorations, conducting general meetings, such as staff meetings, briefings, conferences, or workshops, and assigning sponsors for newly assigned personnel.

TRAINING ANALYSIS

Occupational survey data are sources of information, which can be useful in the development, and revision of relevant training programs for entry-level personnel. Factors used to evaluate entry-level AFSC 4N1X1C Surgical Services training include jobs being performed by first-enlistment (1-48 months TAFMS) personnel, overall distribution of first-enlistment personnel across career ladder jobs, percent first-job (1-24 months TAFMS) and first-enlistment members spend performing specific tasks or using specific equipment items, ratings of how much TE tasks should receive in formal training, and ratings of relative TD.

First-Enlistment Personnel

The three AFSC 4N1X1C members with 1-48 months TAFMS represent 4 percent of all surveyed AFSC 4N1X1C personnel. These personnel work primarily in the Clinic NCOIC Job and Surgical Services Cluster (see Figure 6). Table 41 shows these first-enlistment personnel spending approximately 47 percent of their time performing tasks related to general clinical activities and orthopedic activities, with an additional 19 percent performing sterile operating room activities. Representative tasks performed by first-enlistment AFSC 4N1X1C personnel are displayed in Table 42. Examples of these tasks are scheduling clinic patients' appointments, removing splints, preparing patients for removal of casts or splints, removing casts, ordering x-rays, reviewing patients' health records prior to appointments or surgery, assisting physicians with closed reduction of fractures, and removing sutures from clinic patients.

Table 43 lists special tools or equipment used or operated by AFSC 4N1X1C first-enlistment personnel. Some examples of this equipment include the electric tourniquet devices, surgical stapling devices, hand surgical saws, battery saws, stationary surgical lights, battery surgical drills, orthopedic fracture tables, and hand tables.

4N1X1C FIRST ENLISTMENT PERSONNEL (N = 3)

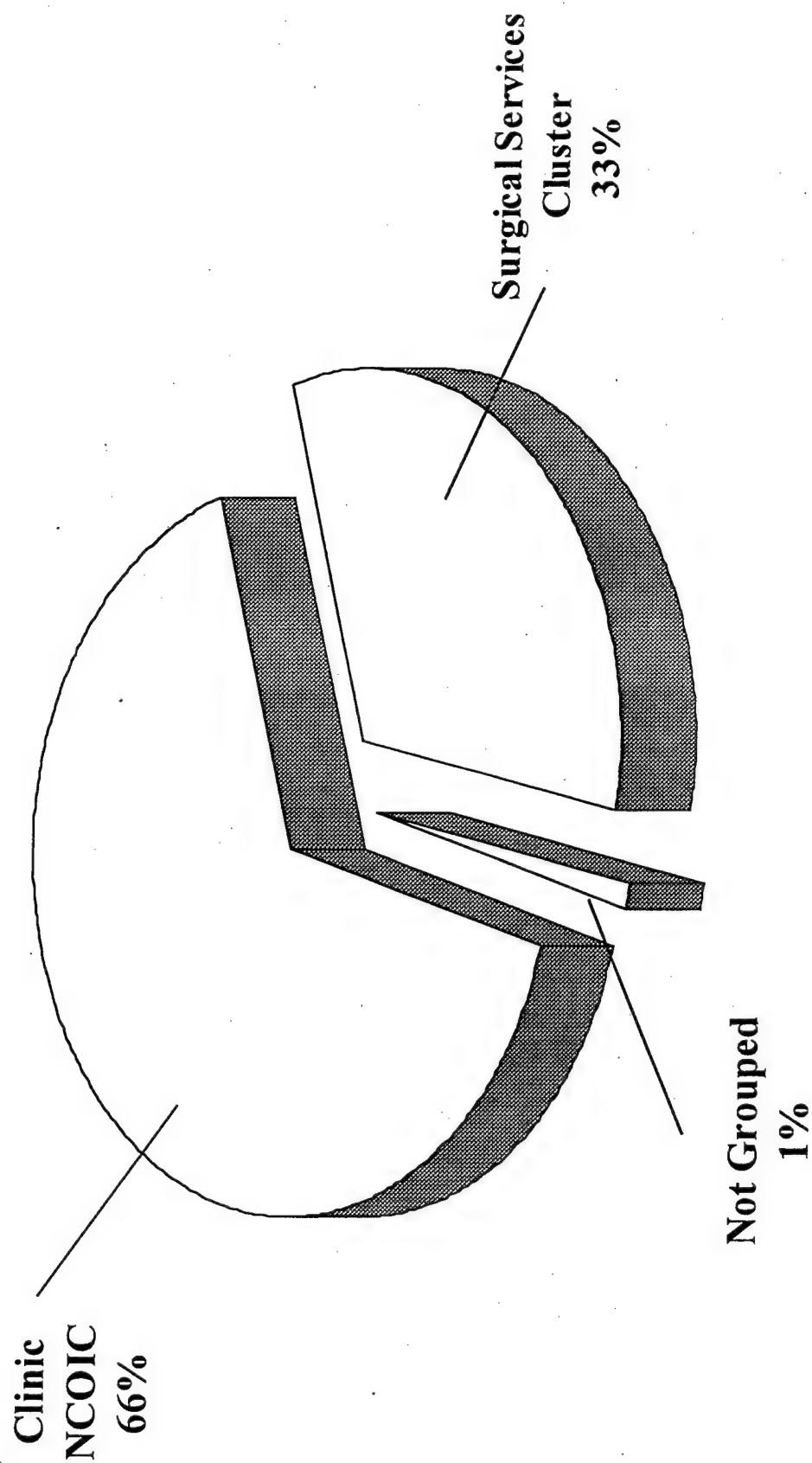


FIGURE 7

TABLE 41

**RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES
BY FIRST-ENLISTMENT AFSC 4N1X1C PERSONNEL**

DUTIES	PERCENT TIME SPENT
A PERFORMING GENERAL CLINICAL ACTIVITIES	24
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	8
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES	*
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	19
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	4
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	7
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	4
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	4
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	*
J PERFORMING ORTHOPEDIC ACTIVITIES	23
K PERFORMING UROLOGY ACTIVITIES	0
L PERFORMING RESEARCH ACTIVITIES	0
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	2
N PERFORMING MEDICAL READINESS ACTIVITIES	2
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	1
P PERFORMING TRAINING ACTIVITIES	1

* Indicates less than 1 percent

TABLE 42

**REPRESENTATIVE TASKS PERFORMED BY
FIRST-ENLISTMENT AFSC 4N1X1C PERSONNEL**

TASKS		PERCENT MEMBERS PERFORMING (N=3)
A0044	Schedule clinic patients' appointments	100
J0285	Remove splints	100
J0282	Prepare patients for removal of casts or splints	100
J0284	Remove casts	100
A0023	Order x-rays	100
A0041	Review patients' health records prior to appointments or surgery	100
J0277	Assist physicians with closed reduction of fractures	100
A0036	Remove sutures from clinic patients	100
A0035	Remove skin staples from clinic patients	100
A0037	Remove and dispose of sharps in clinic	100
D0135	Perform sterile draping of surgical equipment, such as microscopes or x-ray units	100
A0027	Prepare patients for clinic examinations	100
D0120	Assist surgeons in applying sterile drapes while scrubbed	100
D0125	Don or doff surgical attire, other than sterile gowns or gloves, for operating room (OR) activities	100
D0133	Perform hand and arm scrubs	100
D0131	Pass instruments or supplies to operating team members using traditional techniques	100
A0007	Change dressings or packs in clinic	100
J0266	Apply short arm scaphoid plaster or fiberglass splints	100
J0267	Apply short arm sugar tong plaster or fiberglass splints	100
A0003	Answer patient medical inquiries	100
A0002	Answer appointment telephone lines	67

Average number of tasks performed = 154

TABLE 43

**SPECIAL TOOLS OR EQUIPMENT USED OR OPERATED
BY 4N1X1C FIRST-ENLISTMENT PERSONNEL
(PERCENT MEMBERS RESPONDING)**

SPECIAL TOOLS/EQUIPMENT	1ST ENL (N=3)
Electric Tourniquet Devices	100
Surgical Stapling Devices	100
Hand Surgical Saws	100
Battery Surgical Saws	100
Stationary Surgical Lights	100
Battery Surgical Drills	100
Orthopedic Fracture Tables and Accessories	100
Hand Tables	100
Fiber Optic Light Sources	100
Cast Carts	100
Cast Saws	100
Stationary X-Ray Machines	67
Portable X-Ray Machines	67
Portable X-Ray Fluoroscopy Units	67
Traction Devices	67
Gas-Powered Surgical Saws	67
Electric Surgical Saws	67
Portable Surgical Microscopes	67
Hand Surgical Drills	67
Stationary Suction Units	67
Steam (Flash) Sterilizers	67
Gravity Displacement Steam Sterilizers	67
Specialized Retractors	67
Int & Ext Ortho Fracture Fixation Instruments	67
Manual Control Operating (Surgical) Tables	67

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. Therefore, the disks included attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions. The responses of the current survey sample were analyzed by making comparisons among TAFMS groups of the AFSC 4N1X1C career ladders and a comparative sample of personnel from other Medical AFSCs surveyed in 1997.

Comparison of job satisfaction indicators in the AFSC 4N1X1C TAFMS groups to the comparative sample shows a generally lower job satisfaction (see Table 44). First-enlistment members appear to show a higher expressed job interest and sense of accomplishment from job than the other TAFMS groups, but have a much lower perceived use of talents, perceived use of training, and reenlistment intentions. Reenlistment intentions increase with time in service across TAFMS groups, with first-enlistment personnel least likely to reenlist in comparison to the other medical groups and the other "C" shred TAFMS groups.

IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted primarily to ensure current data for use in evaluating the effectiveness of training within the Surgical Services specialty. "C" shred data compiled from this survey show current members follow a typical career progression pattern. The present classification structure, as described in AFMAN 36-2108 *Airman Classification*, accurately portrays the "C" shred jobs in this study.

Job satisfaction analysis reveals first-enlistment (1-48 months TAFMS) personnel don't feel they are utilizing their talents or training within their job and 67 percent are not planning to reenlist. For the most part, the remaining respondents appear satisfied with their jobs. The only area that needs to be examined is the low percentage of members that plan to reenlist for the 1-48 month's TAFMS group.

TABLE 44

**COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 4N1X1C
TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE
(PERCENT MEMBERS RESPONDING)**

	1-48 MONTHS TAFMS		49-96 MONTHS		97+ MONTHS	
	4N1X1C (N=3)	COMP SAMPLE (N=711)	4N1X1C (N=29)	COMP SAMPLE (N=446)	4N1X1C (N=46)	COMP SAMPLE (N=1018)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	100	70	90	76	92	81
SO-SO	0	18	10	15	4	13
DULL	0	12	0	9	4	6
<u>PERCEIVED USE OF TALENTS</u>						
FAIRLY WELL TO PERFECT LITTLE OR NOT AT ALL	67 33	78 22	93 7	84 16	74 26	88 12
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY LITTLE OR NOT AT ALL	67 33	93 7	86 14	92 8	80 20	88 12
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
SATISFIED	100	71	97	75	78	78
NEUTRAL	0	14	0	14	7	8
DISSATISFIED	0	15	3	11	15	14
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	33	51	52	64	76	71
NO OR PROBABLY NO	67	49	45	35	9	10
WILL RETIRE	0	0	3	1	15	19

NOTE: Columns may not add to 100 percent due to rounding or nonresponse
Comparative data are from Medical AFSCs surveyed in 1997

PART FOUR

AFSC 4N1X1D

Analysis of DAFSC Groups

The distribution of AFSC 4N1X1D skill-level members across career ladder jobs is displayed in Table 45. A vast majority of 3- and 5-skill level members are represented in Otorhinolaryngology (ENT) Technician Job. This job represents the core work of the AFSC 4N1X1D career ladder. Table 46 displays the relative percent time spent on each duty across skill level groups. As "D" shred personnel progress through the career ladder, their job remains technical through the 5-skill level and becomes more supervisory at the 7-skill level. The career ladder progression is typical of most AFSCs. Discussed below are specific skill-level descriptions.

Skill-Level Descriptions

DAFSC 4N131D. The 5 3-skill level personnel, representing less than 1 percent of the survey sample, perform an average of 129 tasks. The 3-skill level personnel only perform two jobs, with most in the ENT Technician Job and a small percentage in the Clinic NCOIC Job (see Table 45). While spending 51 percent of their time performing general clinical activities, and performing sterile operating room activities (see Table 46), they also spend 12 percent of their time performing logistics or resource management activities. Table 47 shows these group members performing tasks such as scheduling clinic patients' appointments, answering appointment telephone lines, preparing patients for clinic examinations, removing foreign bodies from ears using suction method, briefing patients on clinical policies, and removing foreign bodies from ears using alligator forceps.

DAFSC 4N151D. The 22 "D" shred 5-skill level personnel represent 3 percent of the career ladder. Personnel perform an average of 146 tasks. Unlike the 3-skill level members, these personnel work in 4 of the 9 jobs identified in the career ladder structure. While a majority work in the ENT Technician Job, smaller percentages are found in the Clinic NCOIC Job, Surgical Logistics Job, and Supervisory and Management Job (see Table 45). They spend 39 percent of their job time performing general clinical activities and performing sterile operating room activities, with another 28 percent of their time performing logistics or resource management activities and performing administrative or management activities (see Table 46). Table 48 lists representative tasks performed by these incumbents. Table 49 shows that, like their junior counterparts, 5-skill level personnel perform the same technical tasks, but with more time spent on supervisory and training functions.

DAFSC 4N171D. The 8 members holding the 7-skill level represent 1 percent of the survey sample. Sixty-three percent are Technical Sergeants. As shown in Table 45, 38 percent work in the Clinic NCOIC Job; however, 26 percent are still working in the ENT Technician Job and Supervisory and Management Job. Table 46 shows that 7-skill level members spend 48 percent of

TABLE 45

**DISTRIBUTION OF AFSC 4N1X1D SKILL-LEVEL MEMBERS ACROSS CAREER LADDER JOBS
(PERCENT MEMBERS RESPONDING)**

<u>SPECIALTY JOBS</u>	DAFSC 4N131D (N=5)	DAFSC 4N151D (N=22)	DAFSC 4N171D (N=8)
I. SURGICAL SERVICES CLUSTER	0	0	0
A. Entry Level Operating Room Technician Job	0	0	0
B. Operating Room Technician Job	0	0	0
C. Phase II Instructor	0	0	0
II. CENTRAL STERILE SUPPLY (CSS) TECHNICIAN JOB	0	0	0
III. OTORHINOLARYNGOLOGY (ENT) TECHNICIAN JOB	60	55	13
IV. UROLOGY TECHNICIAN JOB	0	0	0
V. ORTHOPEDIC TECHNICIAN JOB	0	0	0
VI. CLINIC NCOIC JOB	20	18	38
VII. SURGICAL LOGISTICS JOB	0	5	0
VIII. SUPERVISORY AND MANAGEMENT JOB	0	14	13
IX. SUPERINTENDENT JOB	0	0	0
X. NOT GROUPED	20	8	36

TABLE 46

**TIME SPENT ON DUTIES BY MEMBERS OF AFSC 4N1X1D SKILL-LEVEL GROUPS
(RELATIVE PERCENT OF JOB TIME)**

DUTIES	DAFSC 4N131D (N=5)	DAFSC 4N151D (N=22)	DAFSC 4N171D (N=8)
A PERFORMING GENERAL CLINICAL ACTIVITIES	30	20	24
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	5	4	3
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES	*	1	*
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	21	19	11
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	3	3	2
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	6	5	3
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	3	2	2
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	1	2	2
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	9	8	7
J PERFORMING ORTHOPEDIC ACTIVITIES	0	*	0
K PERFORMING UROLOGY ACTIVITIES	0	0	0
L PERFORMING RESEARCH ACTIVITIES	0	0	*
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	12	14	13
N PERFORMING MEDICAL READINESS ACTIVITIES	1	2	2
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	7	14	24
P PERFORMING TRAINING ACTIVITIES	1	6	7

* Indicates less than 1 percent

TABLE 47

**REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N131D PERSONNEL**

TASKS	PERCENT MEMBERS PERFORMING (N=5)
A0044 Schedule clinic patients' appointments	100
A0002 Answer appointment telephone lines	100
A0027 Prepare patients for clinic examinations	100
I0235 Remove foreign bodies from ears using suction method	100
A0005 Brief patients on clinical policies	100
I0233 Remove foreign bodies from ears using alligator forceps	100
A0017 Inspect clinic equipment or instruments for cleanliness	100
A0009 Contact new patients for appointments	100
A0018 Instruct patients in filling out forms, such as patient histories or consent forms	100
A0026 Prepare accessory equipment, such as lamps, for clinic procedures	100
A0038 Return clinic patients' health records	100
A0032 Prepare or distribute daily clinic schedules	100
D0114 Assist physicians with otorhinolaryngology (ENT) procedures	80
A0043 Schedule patients for surgery	80
I0207 Assist physicians with otorhinolaryngology surgical procedures in clinic	80
A0004 Assist physicians in noninvasive physical examinations	80
I0234 Remove foreign bodies from ears using curettage method	80
B0067 Manually clean and test flexible endoscopes	80
A0003 Answer patient medical inquiries	80
A0030 Prepare sterile setups for clinic procedures	80
D0104 Assist physicians with minimally invasive procedures	80
A0041 Review patients' health records prior to appointments or surgery	80
A0013 Don or doff surgical attire in clinic	80
A0042 Review SFs 513 (Medical Record - Consultation Sheet)	80
D0099 Arrange sterile instruments and supplies on back tables while scrubbed	80

Average number of tasks performed = 129

TABLE 48

**REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N151D PERSONNEL**

TASKS	PERCENT MEMBERS PERFORMING (N=22)
A0002 Answer appointment telephone lines	91
A0044 Schedule clinic patients' appointments	91
D0114 Assist physicians with otorhinolaryngology (ENT) procedures	91
A0017 Inspect clinic equipment or instruments for cleanliness	91
A0039 Return unused supplies to storage areas in clinic	91
A0040 Review expiration dates on clinics' sterile instruments, supplies, or drugs	91
A0037 Remove and dispose of sharps in clinic	91
A0046 Transport clinical specimens to laboratories	91
A0009 Contact new patients for appointments	86
I0235 Remove foreign bodies from ears using suction method	86
A0043 Schedule patients for surgery	86
I0233 Remove foreign bodies from ears using alligator forceps	86
I0234 Remove foreign bodies from ears using curettage method	86
I0236 Remove foreign bodies from ears using wire loops	86
A0031 Prepare and drape patients for clinic procedures	86
A0038 Return clinic patients' health records	82
D0119 Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	82
D0120 Assist surgeons in applying sterile drapes while scrubbed	82
D0131 Pass instruments or supplies to operating team members using traditional techniques	82
D0129 Label drugs or solutions within sterile field	82
M0345 Perform periodic inventories of dated medications	82
D0121 Break down sterile fields while scrubbed	82
D0132 Pass specimens to circulators	82
D0126 Establish sterile fields in OR while scrubbed	82
D0099 Arrange sterile instruments and supplies on back tables while scrubbed	82

Average number of tasks performed = 146

TABLE 49

**TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4N131D AND DAFSC 4N151D PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 4N131D (N=5)	DAFSC 4N151D (N=22)	DIFFERENCE
H0203 Transport frozen sections to laboratories	60	14	46
B0056 Develop or maintain customer requisition forms for CSS supplies or services	40	*	40
A0029 Prepare physical profile forms	60	23	37
A0027 Prepare patients for clinic examinations	100	68	32
F0165 Prepare disinfecting solutions for skin	60	32	28
A0018 Instruct patients in filling out forms, such as patient histories or consent forms	100	73	27
G0177 Clean OR support areas postoperatively	40	14	26
F0153 Assist professional staff in performing counts of sponges, instruments, needles, or related supplies while circulating	80	55	25
I0205 Apply aluminum or fiberglass nasal splints	*	41	-41
M0325 Determine or establish logistics requirements, such as personnel, equipment, tools, parts, supplies, or workspace	20	59	-39
M0346 Perform periodic inventories of equipment or supplies, other than dated medications	40	77	-37
M0344 Order pharmacy supplies	40	77	-37
I0208 Clean mastoid cavities	40	77	-37
I0206 Apply anterior nasal splints	*	36	-36
O0451 Write correspondence, such as letters, point papers, or staff summary sheets	*	36	-36
A0034 Remove drains from clinic patients	*	36	-36

TABLE 50
REPRESENTATIVE TASKS PERFORMED
BY DAFSC 4N171D PERSONNEL

TASKS	PERCENT MEMBERS PERFORMING (N=8)
A0017 Inspect clinic equipment or instruments for cleanliness	100
A0002 Answer appointment telephone lines	100
A0026 Prepare accessory equipment, such as lamps, for clinic procedures	100
M0344 Order pharmacy supplies	100
A0005 Brief patients on clinical policies	100
A0036 Remove sutures from clinic patients	100
I0235 Remove foreign bodies from ears using suction method	100
A0039 Return unused supplies to storage areas in clinic	100
M0356 Verify receipt of supplies from medical logistics	100
A0027 Prepare patients for clinic examinations	100
A0046 Transport clinical specimens to laboratories	100
D0114 Assist physicians with otorhinolaryngology (ENT) procedures	100
A0004 Assist physicians in noninvasive physical examinations	100
M0341 Order medical supplies using local purchase procedures	100
M0343 Order nonmedical supplies using local purchase procedures	100
M0353 Review using activity issue/turn-in lists	100
A0040 Review expiration dates on clinics' sterile instruments, supplies, or drugs	100
M0355 Review backorder reports	100
A0003 Answer patient medical inquiries	88
O0410 Develop or establish work schedules	88
A0043 Schedule patients for surgery	88
A0022 Obtain clinic patients' health records	88
A0041 Review patients' health records prior to appointments or surgery	88
A0006 Brief physicians on patient followups	88
I0236 Remove foreign bodies from ears using wire loops	88

Average number of tasks performed = 186

TABLE 51

**TASKS WHICH BEST DIFFERENTIATE BETWEEN DAFSC 4N151D AND DAFSC 4N171D PERSONNEL
(PERCENT MEMBERS PERFORMING)**

TASKS	DAFSC 4N151D (N=22)	DAFSC 4N171D (N=8)	DIFFERENCE
B0062	50	13	38
D0112	41	13	28
A0045	64	38	26
F0159	64	38	26
A0012	50	25	25
A0009	86	63	24
B0047	73	50	23
D0130	73	50	23
B0080	45	25	20
O0423	27	88	-60
O0393	9	63	-53
P0482	9	63	-53
O0457	23	75	-52
O0399	23	75	-52
O0453	36	88	-51
P0483	14	63	-49
O0431	27	75	-48
O0390	27	75	-48

their time performing general clinical activities and performing administrative or management activities. In addition, they spend 24 percent of their time performing sterile operating room activities and logistics or resource management activities. Table 50 lists representative tasks performed by members in the 7-skill level.

Tasks, which best distinguish DAFSC 4N151D personnel from 7-skill level members are presented in Table 51. Seven-skill level members show a marked increase in the amount of supervisory and management tasks performed. Examples of tasks with the greatest difference in members performing include evaluating personnel for promotion, demotion, collecting statistical data, other than for daily patient counts or patient audit trails, preparing job qualification standards, writing or indorsing military performance reports, and writing job or position descriptions.

TRAINING ANALYSIS

Occupational survey data are sources of information that can be useful in the development and revision of relevant training programs for entry-level personnel. Factors used to evaluate entry-level AFSC 4N1X1D Surgical Services training include jobs being performed by first-enlistment (1-48 months TAFMS) personnel, overall distribution of first-enlistment personnel across career ladder jobs, percent first-job (1-24 months TAFMS) and first-enlistment members spend performing specific tasks or using specific equipment items, ratings of how much emphasis tasks should receive in formal training, and ratings of relative task difficulty.

First-Enlistment Personnel

There are 2 members in their first-enlistment for AFSC 4N1X1D, representing 6 percent of all surveyed AFSC 4N1X1D personnel. The ENT Technician Job and Clinic NCOIC are core to the "D" shred (see Figure 7). Table 52 shows that first-enlistment members are spending 49 percent of their relative time performing general clinical activities and performing sterile operating room activities. Another 21 percent of their time is spent performing logistics or resource management activities and administrative or management activities. First-enlistment AFSC 4N1X1D personnel perform an average of 158 tasks (see Table 53) ranging from assisting physicians with otorhinolaryngology surgical procedures in clinic to removing sutures from clinic patients.

Table 54 lists special tools or equipment used or operated by AFSC 4N1X1D first-enlistment personnel. Some examples of this equipment include blood pressure monitoring equipment, fiber optic light sources, microscopic instruments, electrical control operating (surgical) tables, steam (flash) sterilizers, stationary suction units, and electric surgical drills.

4N1X1D FIRST ENLISTMENT PERSONNEL (N = 2)

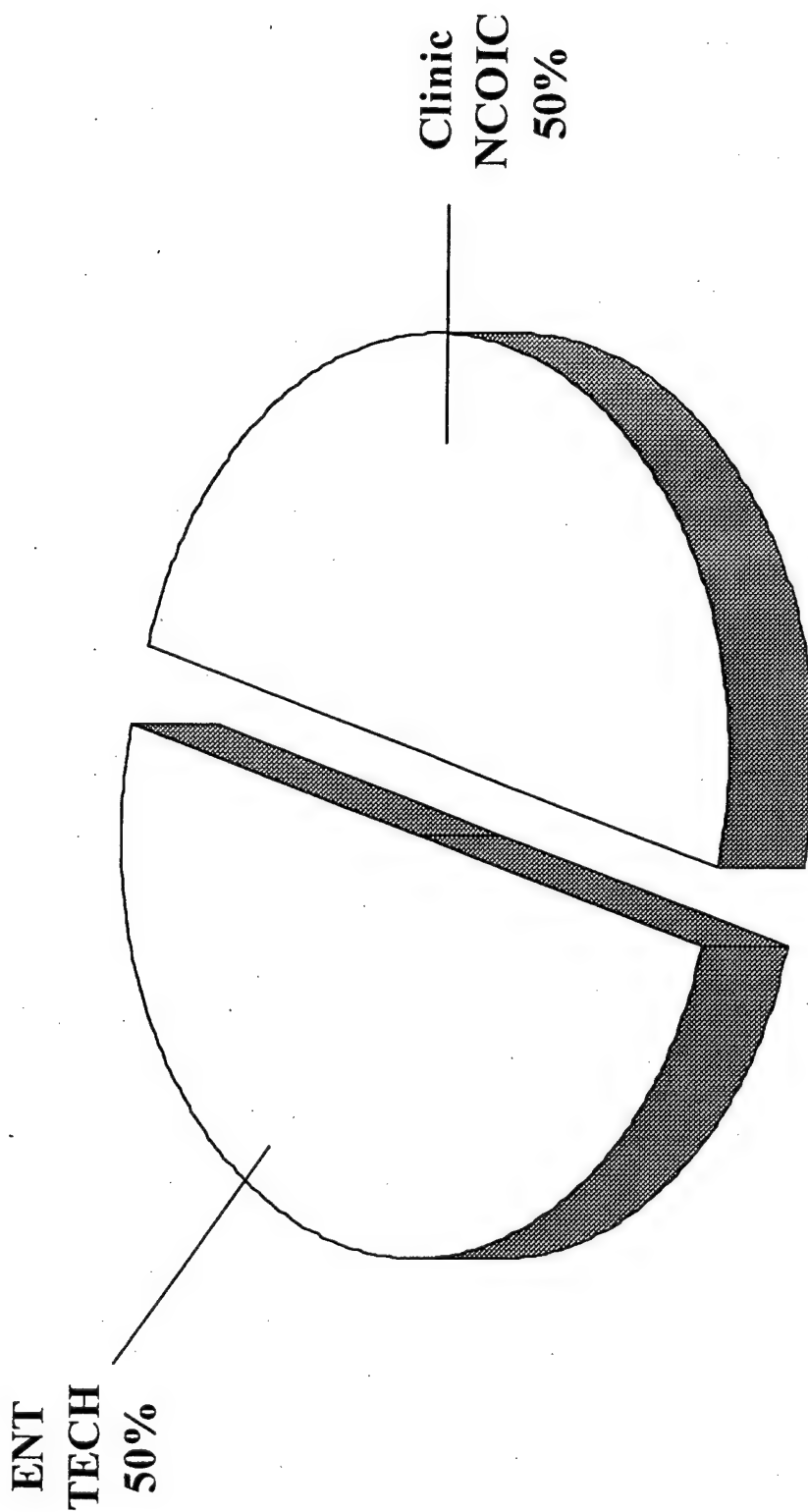


FIGURE 8

TABLE 52

**RELATIVE PERCENT OF TIME SPENT ACROSS DUTIES
BY FIRST-ENLISTMENT AFSC 4N1X1D PERSONNEL**

DUTIES	PERCENT TIME SPENT
A PERFORMING GENERAL CLINICAL ACTIVITIES	25
B PERFORMING CENTRAL STERILE SUPPLY (CSS) ACTIVITIES	4
C PERFORMING ANESTHESIA SUPPORT ACTIVITIES	0
D PERFORMING STERILE OPERATING ROOM ACTIVITIES	24
E PERFORMING NONSTERILE PREOPERATIVE OPERATING ROOM ACTIVITIES	5
F PERFORMING NONSTERILE INTRAOPERATIVE OPERATING ROOM ACTIVITIES	6
G PERFORMING NONSTERILE POSTOPERATIVE OPERATING ROOM ACTIVITIES	2
H PERFORMING OPERATING ROOM TRANSPORT OR OUTSIDE FLOAT ACTIVITIES	1
I PERFORMING OTORHINOLARYNGOLOGY (ENT) ACTIVITIES	9
J PERFORMING ORTHOPEDIC ACTIVITIES	0
K PERFORMING UROLOGY ACTIVITIES	0
L PERFORMING RESEARCH ACTIVITIES	0
M PERFORMING LOGISTICS OR RESOURCE MANAGEMENT ACTIVITIES	11
N PERFORMING MEDICAL READINESS ACTIVITIES	2
O PERFORMING ADMINISTRATIVE OR MANAGEMENT ACTIVITIES	10
P PERFORMING TRAINING ACTIVITIES	0

* Indicates less than 1 percent

NOTE: Time spent does not total 100 percent due to rounding

TABLE 53

**REPRESENTATIVE TASKS PERFORMED BY
FIRST-ENLISTMENT AFSC 4N1X1D PERSONNEL**

TASKS		PERCENT MEMBERS PERFORMING (N=2)
I0207	Assist physicians with otorhinolaryngology surgical procedures in clinic	100
A0018	Instruct patients in filling out forms, such as patient histories or consent forms	100
D0129	Label drugs or solutions within sterile field	100
A0032	Prepare or distribute daily clinic schedules	100
D0133	Perform hand and arm scrubs	100
A0026	Prepare accessory equipment, such as lamps, for clinic procedures	100
A0025	Perform initial patient screenings	100
A0030	Prepare sterile setups for clinic procedures	100
D0122	Correct breaks in sterile techniques by members of operating teams while scrubbed	100
A0035	Remove skin staples from clinic patients	100
A0013	Don or doff surgical attire in clinic	100
D0126	Establish sterile fields in OR while scrubbed	100
A0015	Establish patient identity/eligibility for services (DEERS)	100
A0017	Inspect clinic equipment or instruments for cleanliness	100
D0123	Dispose of sterile gowns or gloves	100
E0149	Prepare formalin containers for surgical specimens	100
D0121	Break down sterile fields while scrubbed	100
A0002	Answer appointment telephone lines	100
D0132	Pass specimens to circulators	100
E0140	Arrange packaged sterile instruments and supplies on back tables while circulating	100
D0136	Prepare and handle specimens while scrubbed	100
A0036	Remove sutures from clinic patients	100

Average number of tasks performed = 158

TABLE 54

**SPECIAL TOOLS OR EQUIPMENT USED OR OPERATED
BY 4N1X1D FIRST-ENLISTMENT PERSONNEL
(PERCENT MEMBERS RESPONDING)**

SPECIAL EQUIPMENT/TOOLS	1ST ENL (N=2)
Blood Pressure Monitoring Equipment	100
Fiber Optic Light Sources	100
Microscopic Instruments	100
Electrical Control Operating (Surgical) Tables	100
Steam (Flash) Sterilizers	100
Stationary Suction Units	100
Electric Surgical Drills	100
Portable Surgical Lights	100
Stationary Surgical Lights	100
Portable Surgical Microscopes	100
Tympanometers	100
Bronchoscopes and Accessories	50
Powered Dermatomes	50
Flexible Fiber Optic Endoscopes	50
Rigid Endoscopes	50
Gastrosopes and Accessories	50
Nerve Stimulators	50
Manual Control Operating (Surgical) Tables	50
Stationary Operating (Surgical) Tables	50

JOB SATISFACTION ANALYSIS

An examination of job satisfaction indicators can give career ladder managers a better understanding of factors that may affect the job performance of career ladder airmen. Therefore, the survey booklet included attitude questions covering job interest, perceived utilization of talents and training, sense of accomplishment from work, and reenlistment intentions. The responses of the current survey sample were analyzed by making comparisons among TAFMS groups of the AFSC 4N1X1D career ladders and a comparative sample of personnel from other Medical AFSCs surveyed in 1997.

Table 55 reflects similar results for AFSC 4N1X1D members as found in the other shreds of the career ladder. Overall job satisfaction appears slightly less than the comparative sample. First-enlistment personnel, however, report higher job satisfaction indicators in all five areas. The probability of 49-96 months TAFMS members reenlisting is fairly low in comparison to other groups and the comparative sample. Second-enlistment members reported the lowest sense of accomplishment from the job. Finally, the 97+ month group job interest was slightly lower in the areas of perceived use of talents, sense of accomplishment from job, and perceived use of training, but had a higher expressed job interest than the comparative sample.

IMPLICATIONS

As explained in the **INTRODUCTION**, this survey was conducted primarily to ensure current data for use in evaluating the effectiveness of training within the Surgical Services specialty. "D" shred data compiled from this survey show current members follow a typical career progression pattern. The present classification structure, as described in AFMAN 36-2108 *Airman Classification*, accurately portrays the "D" shred jobs in this study.

Job satisfaction data indicate first-enlistment AFSC 4N1X1D personnel are very satisfied with their jobs. Second-enlistment AFSC 4N1X1D personnel are less satisfied with their jobs than the comparative sample in all areas. No serious job satisfaction problems appear to exist in the "D" shred members except when you look at reenlistment intentions for the 49-96 months TAFMS group.

The findings of this OSR come directly from survey data collected from AFSC 4N1X1D personnel worldwide. Much of the data are compiled into extracts, which are excellent tools in the decision-making process. These data extracts should be used when training or utilization decisions are made.

TABLE 55

**COMPARISON OF JOB SATISFACTION INDICATORS FOR AFSC 4N1X1D
TAFMS GROUPS IN CURRENT STUDY TO A COMPARATIVE SAMPLE
(PERCENT MEMBERS RESPONDING)**

	1-48 MONTHS TAFMS		49-96 MONTHS		97+ MONTHS	
	4N1X1D (N=2)	COMP SAMPLE (N=711)	4N1X1D (N=12)	COMP SAMPLE (N=446)	4N1X1D (N=21)	COMP SAMPLE (N=1018)
<u>EXPRESSED JOB INTEREST</u>						
INTERESTING	100	70	75	76	92	67
SO-SO	0	18	8	15	4	19
DULL	0	12	17	9	4	14
<u>PERCEIVED USE OF TALENTS</u>						
FAIRLY WELL TO PERFECT	100	78	75	84	74	81
LITTLE OR NOT AT ALL	0	22	25	16	26	19
<u>PERCEIVED USE OF TRAINING:</u>						
FAIRLY WELL TO PERFECTLY	100	93	66	92	80	81
LITTLE OR NOT AT ALL	0	7	34	8	20	19
<u>SENSE OF ACCOMPLISHMENT FROM JOB</u>						
SATISFIED	100	70	59	75	78	80
NEUTRAL	0	15	8	14	7	10
DISSATISFIED	0	15	33	11	15	10
<u>REENLISTMENT INTENTIONS</u>						
YES OR PROBABLY YES	100	51	42	64	76	70
NO OR PROBABLY NO	0	49	58	35	9	25
WILL RETIRE	0	0	0	1	15	5

NOTE: Columns may not add to 100 percent due to rounding or nonresponse
Comparative data are from Medical AFSCs surveyed in 1998

APPENDIX A

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TABLE I

SURGICAL SERVICES CLUSTER
(ST043)

GROUP SIZE: 478
 PERCENT OF SAMPLE: 63%
 PREDOMINANT GRADE: E-3
 AVERAGE NUMBER OF TASKS PERFORMED: 143

AVERAGE TICF: 5 YRS
 AVERAGE TAFMS: 6 YRS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

REPRESENTATIVE TASKS		PERCENT MEMBERS PERFORMING
D0126	Establish sterile fields in OR while scrubbed	99
D0133	Perform hand and arm scrubs	99
D0127	Identify and properly manage dirty instruments or contaminated field	99
D0124	Don or doff sterile gowns or gloves	99
D0132	Pass specimens to circulators	99
D0134	Perform preliminary cleaning of soiled instruments prior to return to CSS	98
D0129	Label drugs or solutions within sterile field	98
D0136	Prepare and handle specimens while scrubbed	98
D0120	Assist surgeons in applying sterile drapes while scrubbed	98
D0128	Identify drugs or solutions prior to accepting transfer to sterile field while scrubbed	97
D0099	Arrange sterile instruments and supplies on back tables while scrubbed	97
D0122	Correct breaks in sterile techniques by members of operating teams while scrubbed	97
D0123	Dispose of sterile gowns or gloves	97
D0097	Adjust Mayo instrument tray stands while scrubbed	97
D0119	Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	96
D0118	Assist professional staff in donning or doffing sterile gowns or gloves while scrubbed	96
D0131	Pass instruments or supplies to operating team members using traditional techniques	96
E0150	Pull surgical supplies, instruments, or equipment	96
E0143	Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	96
D0121	Break down sterile fields while scrubbed	95
D0098	Adjust overhead operating lights while scrubbed	95
F0155	Assist sterile team members with donning or removing surgical attire	95

TABLE II

ENTRY-LEVEL OPERATING ROOM TECHNICIAN JOB
(ST046)

GROUP SIZE: 34

AVERAGE TICF: 2 YRS

PERCENT OF SAMPLE: 4%

AVERAGE TAFMS: 3 YRS

PREDOMINANT GRADE: E-3

AVERAGE NUMBER OF TASKS PERFORMED: 21

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
D0126 Establish sterile fields in OR while scrubbed	100
D0129 Label drugs or solutions within sterile field	100
D0132 Pass specimens to circulators	100
D0134 Perform preliminary cleaning of soiled instruments prior to return to CSS	97
D0136 Prepare and handle specimens while scrubbed	97
D0123 Dispose of sterile gowns or gloves	97
D0133 Perform hand and arm scrubs	94
D0131 Pass instruments or supplies to operating team members using traditional techniques	94
D0127 Identify and properly manage dirty instruments or contaminated field	94
D0124 Don or doff sterile gowns or gloves	94
D0119 Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	91
D0128 Identify drugs or solutions prior to accepting transfer to sterile field while scrubbed	91
D0099 Arrange sterile instruments and supplies on back tables while scrubbed	88
D0120 Assist surgeons in applying sterile drapes while scrubbed	88
D0097 Adjust Mayo instrument tray stands while scrubbed	88
D0135 Perform sterile draping of surgical equipment, such as microscopes or x-ray units	88
D0121 Break down sterile fields while scrubbed	85
D0118 Assist professional staff in donning or doffing sterile gowns or gloves while scrubbed	85
D0122 Correct breaks in sterile techniques by members of operating teams while scrubbed	85
D0098 Adjust overhead operating lights while scrubbed	85
D0137 Prepare and handle surgical implants while scrubbed	79
D0125 Don or doff surgical attire, other than sterile gowns or gloves, for operating room (OR) activities	76

TABLE III
OPERATING ROOM TECHNICIAN JOB
(ST048)

GROUP SIZE: 434
PERCENT OF SAMPLE: 57%
PREDOMINANT GRADE: E-3
AVERAGE NUMBER OF TASKS PERFORMED: 151

AVERAGE TICF: 5 YRS
AVERAGE TAFMS: 6 YRS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
D0133 Perform hand and arm scrubs	99
D0126 Establish sterile fields in OR while scrubbed	99
D0127 Identify and properly manage dirty instruments or contaminated field	99
D0124 Don or doff sterile gowns or gloves	99
D0120 Assist surgeons in applying sterile drapes while scrubbed	99
D0132 Pass specimens to circulators	99
D0136 Prepare and handle specimens while scrubbed	98
D0099 Arrange sterile instruments and supplies on back tables while scrubbed	98
D0134 Perform preliminary cleaning of soiled instruments prior to return to CSS	98
D0128 Identify drugs or solutions prior to accepting transfer to sterile field while scrubbed	98
D0129 Label drugs or solutions within sterile field	98
D0097 Adjust Mayo instrument tray stands while scrubbed	98
D0122 Correct breaks in sterile techniques by members of operating teams while scrubbed	98
E0150 Pull surgical supplies, instruments, or equipment	98
E0143 Open sterile supplies, such as muslin-wrapped, paper-wrapped, or peel-packaged sterile supplies	98
D0118 Assist professional staff in donning or doffing sterile gowns or gloves while scrubbed	97
D0119 Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	97
F0155 Assist sterile team members with donning or removing surgical attire	97
D0123 Dispose of sterile gowns or gloves	97
D0098 Adjust overhead operating lights while scrubbed	97
G0189 Stock OR with sterile or nonsterile supplies	97
D0121 Break down sterile fields while scrubbed	96
D0108 Assist physicians with general surgery procedures	96

TABLE IV

PHASE II INSTRUCTORS
(ST056)

GROUP SIZE: 9
 PERCENT OF SAMPLE: 1%
 PREDOMINANT GRADE: E-5
 AVERAGE NUMBER OF TASKS PERFORMED: 134

AVERAGE TICF: 9 YRS
 AVERAGE TAFMS: 11 YRS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
 PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
P0466 Conduct on-the-job training (OJT)	100
G0180 Doff personal protective attire	100
E0142 Establish sterile fields in OR as circulator	100
F0173 Transfer patients to or from OR tables	100
E0150 Pull surgical supplies, instruments, or equipment	100
F0160 Identify breaks in sterile techniques by members of operating teams while circulating	100
G0189 Stock OR with sterile or nonsterile supplies	100
E0145 Perform initial or between-case cleaning of OR	100
E0144 Perform initial or between-case cleaning of equipment	100
F0162 Position patients on operating tables	100
F0155 Assist sterile team members with donning or removing surgical attire	100
F0163 Position sterile tables or related equipment, such as monitors, microscopes, or lasers	100
F0156 Assist surgeons in applying sterile drapes while circulating	100
F0152 Apply electrosurgical devices to patients	100
F0159 Identify drugs or solutions prior to transfer to sterile field while circulating	100
F0165 Prepare disinfecting solutions for skin	100
G0176 Change compressed medical gas tanks on OR equipment	100
F0161 Perform surgical skin cleansings	100
E0146 Perform operator maintenance inspections of OR equipment	100
P0467 Counsel trainees on training progress	89
P0476 Evaluate progress of trainees	89
O0402 Consult daily assignment sheets	89
P0465 Conduct individual training sessions	89
P0468 Determine training requirements	89
O0433 Inspect personnel for compliance with military standards	89

TABLE V

CENTRAL STERILE SUPPLY (CSS) TECHNICIAN JOB
(ST069)

GROUP SIZE: 12

AVERAGE TICF: 6 YRS

PERCENT OF SAMPLE: 2%

AVERAGE TAFMS: 7 YRS

PREDOMINANT GRADE: E-4

AVERAGE NUMBER OF TASKS PERFORMED: 43

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
B0081 Wrap and label instrument sets for sterilization	100
B0074 Prepare and sterilize items using paper, plastic, or paper and plastic peel-packs	100
B0062 Inspect and identify instruments for operation, repair, or salvage	100
B0064 Load or unload CSS sterilizers	100
B0061 Fold linens for sterilization	100
B0072 Pick up soiled or contaminated items from using units	100
B0047 Assemble instrument sets or equipment after cleaning	92
B0052 Clean instruments or equipment for storage or reprocessing	92
B0075 Prepare and sterilize items using rigid sterilization containers	92
B0068 Monitor CSS sterilizer effectiveness using biological indicators	92
B0073 Prepare surgical supplies or instruments from CSS stock	92
B0071 Perform routine chemical disinfection of surgical instruments or supplies in CSS	92
B0059 Disassemble equipment or instruments in CSS in preparation for manual or mechanical cleaning	92
B0053 Clean and lubricate surgical instruments and powered equipment	92
B0060 Dispose of biocontaminated items from CSS	92
B0055 Deliver clean or sterile items to using units	92
B0078 Review expiration dates on sterile items stored in CSS	92
B0050 Clean CSS sterilizers	92
B0080 Sort equipment for cleaning	83
B0069 Monitor CSS sterilizer effectiveness using chemical indicators	83
B0063 Inventory surgical instruments, supplies, or equipment stored in CSS	83
B0070 Perform operational tests on equipment	83

TABLE VI

OTORHINOLOARYNGOLOGY (ENT) TECHNICIAN JOB
(ST0128)

GROUP SIZE: 20
 PERCENT OF SAMPLE: 3%
 PREDOMINANT GRADE: E-4/E-5
 AVERAGE NUMBER OF TASKS PERFORMED: 133

AVERAGE TICF: 6 YRS
 AVERAGE TAFMS: 8 YRS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
 PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
A0002 Answer appointment telephone lines	100
A0044 Schedule clinic patients' appointments	100
A0043 Schedule patients for surgery	100
D0121 Break down sterile fields while scrubbed	100
D0131 Pass instruments or supplies to operating team members using traditional techniques	100
D0120 Assist surgeons in applying sterile drapes while scrubbed	100
D0127 Identify and properly manage dirty instruments or contaminated field	100
D0126 Establish sterile fields in OR while scrubbed	100
D0099 Arrange sterile instruments and supplies on back tables while scrubbed	100
D0133 Perform hand and arm scrubs	100
A0017 Inspect clinic equipment or instruments for cleanliness	100
D0119 Assist professional staff in performing counts of sponges, needles, instruments, or related supplies while scrubbed	100
D0124 Don or doff sterile gowns or gloves	100
D0123 Dispose of sterile gowns or gloves	100
D0128 Identify drugs or solutions prior to accepting transfer to sterile field while scrubbed	100
D0118 Assist professional staff in donning or doffing sterile gowns or gloves while scrubbed	100
A0038 Return clinic patients' health records	100
D0132 Pass specimens to circulators	100
D0136 Prepare and handle specimens while scrubbed	100
D0097 Adjust Mayo instrument tray stands while scrubbed	100
D0122 Correct breaks in sterile techniques by members of operating teams while scrubbed	100
D0098 Adjust overhead operating lights while scrubbed	100
A0039 Return unused supplies to storage areas in clinic	100
A0037 Remove and dispose of sharps in clinic	100

TABLE VII
UROLOGY TECHNICIAN JOB
(ST0102)

GROUP SIZE: 25
PERCENT OF SAMPLE: 3%
PREDOMINANT GRADE: E-5
AVERAGE NUMBER OF TASKS PERFORMED: 171

AVERAGE TICF: 5 YRS
AVERAGE TAFMS: 12 YRS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING	
A0002	Answer appointment telephone lines	100
D0115	Assist physicians with urological surgery procedures	100
A0044	Schedule clinic patients' appointments	100
A0031	Prepare and drape patients for clinic procedures	100
A0030	Prepare sterile setups for clinic procedures	100
K0293	Instill xylocaine jellies intraurethrally	100
A0027	Prepare patients for clinic examinations	100
K0287	Catheterize urology patients	100
A0026	Prepare accessory equipment, such as lamps, for clinic procedures	100
D0131	Pass instruments or supplies to operating team members using traditional techniques	100
D0126	Establish sterile fields in OR while scrubbed	100
D0133	Perform hand and arm scrubs	100
D0121	Break down sterile fields while scrubbed	100
A0017	Inspect clinic equipment or instruments for cleanliness	100
D0123	Dispose of sterile gowns or gloves	100
D0125	Don or doff surgical attire, other than sterile gowns or gloves, for operating room (OR) activities	100
D0128	Identify drugs or solutions prior to accepting transfer to sterile field while scrubbed	100
D0132	Pass specimens to circulators	100
A0005	Brief patients on clinical policies	100
D0129	Label drugs or solutions within sterile field	100
D0097	Adjust Mayo instrument tray stands while scrubbed	100
A0040	Review expiration dates on clinics' sterile instruments, supplies, or drugs	100
A0039	Return unused supplies to storage areas in clinic	100
K0286	Assist physicians with urology procedures in clinic	96
D0100	Assist physicians with endoscopic procedures	96

TABLE VIII

ORTHOPEDIC TECHNICIAN JOB
(ST066)

GROUP SIZE: 17
 PERCENT OF SAMPLE: 2%
 PREDOMINANT GRADE: E-5
 AVERAGE NUMBER OF TASKS PERFORMED: 88

AVERAGE TICF: 5 YRS
 AVERAGE TAFMS: 10 YRS

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
J0285	Remove splints	100
J0284	Remove casts	100
J0282	Prepare patients for removal of casts or splints	100
J0269	Apply short leg plaster or fiberglass casts	100
A0044	Schedule clinic patients' appointments	100
J0272	Apply standard long arm plaster or fiberglass casts	100
A0036	Remove sutures from clinic patients	100
J0273	Apply standard short arm plaster or fiberglass casts	100
J0266	Apply short arm scaphoid plaster or fiberglass splints	100
A0035	Remove skin staples from clinic patients	100
J0270	Apply short leg plaster or fiberglass splints	100
J0249	Apply long arm scaphoid plaster or fiberglass splints	100
J0250	Apply long arm sugar tong plaster or fiberglass splints	100
A0040	Review expiration dates on clinics' sterile instruments, supplies, or drugs	100
A0023	Order x-rays	94
A0027	Prepare patients for clinic examinations	94
J0268	Apply short arm plaster or fiberglass splints, other than scaphoid or sugar tong	94
A0037	Remove and dispose of sharps in clinic	94
J0251	Apply long arm plaster or fiberglass splints, other than scaphoid or sugar tong	94
J0253	Apply long leg plaster or fiberglass casts, other than cylinder	94
A0039	Return unused supplies to storage areas in clinic	94
A0041	Review patients' health records prior to appointments or surgery	88
J0265	Apply short arm navicular plaster or fiberglass casts	88
A0002	Answer appointment telephone lines	88
J0254	Apply long leg plaster or fiberglass splints	88

TABLE IX

CLINIC NCOIC JOB
(ST087)

GROUP SIZE: 74

AVERAGE TICF: 7 YRS

PERCENT OF SAMPLE: 10%

AVERAGE TAFMS: 10 YRS

PREDOMINANT GRADE: E-5

AVERAGE NUMBER OF TASKS PERFORMED: 213

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
A0007 Change dressings or packs in clinic	100
A0036 Remove sutures from clinic patients	99
A0037 Remove and dispose of sharps in clinic	99
A0002 Answer appointment telephone lines	97
A0027 Prepare patients for clinic examinations	97
A0005 Brief patients on clinical policies	97
A0035 Remove skin staples from clinic patients	97
D0133 Perform hand and arm scrubs	97
D0124 Don or doff sterile gowns or gloves	97
A0044 Schedule clinic patients' appointments	96
D0120 Assist surgeons in applying sterile drapes while scrubbed	96
A0039 Return unused supplies to storage areas in clinic	96
A0040 Review expiration dates on clinics' sterile instruments, supplies, or drugs	96
F0164 Prepare casting or splinting materials	95
A0004 Assist physicians in noninvasive physical examinations	95
D0123 Dispose of sterile gowns or gloves	95
D0126 Establish sterile fields in OR while scrubbed	95
D0125 Don or doff surgical attire, other than sterile gowns or gloves, for operating room (OR) activities	95
A0023 Order x-rays	93
A0022 Obtain clinic patients' health records	93
F0168 Prepare patients for application of casts or splints	93
A0017 Inspect clinic equipment or instruments for cleanliness	93
A0030 Prepare sterile setups for clinic procedures	93
A0041 Review patients' health records prior to appointments or surgery	92
A0042 Review SFs 513 (Medical Record - Consultation Sheet)	92

TABLE X

SURGICAL LOGISTIS JOB
(ST068)

GROUP SIZE: 14

AVERAGE TICF: 6 YRS

PERCENT OF SAMPLE: 2%

AVERAGE TAFMS: 10 YRS

PREDOMINANT GRADE: E-4

AVERAGE NUMBER OF TASKS PERFORMED: 58

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
M0356 Verify receipt of supplies from medical logistics	100
M0341 Order medical supplies using local purchase procedures	100
M0350 Research data from vendors for equipment purchases or standard medical supply purchases	100
M0353 Review using activity issue/turn-in lists	100
M0355 Review backorder reports	100
M0340 Order medical supplies from USAF supply agencies, other than pharmacy or linen supplies	100
M0342 Order nonmedical supplies from USAF supply agencies	100
M0335 Inventory surgical instruments, supplies, or equipment, other than in CSS or field supplies or equipment	100
M0343 Order nonmedical supplies using local purchase procedures	100
M0351 Research supply catalogs or medical catalog (MEDCAT) supply listings	93
M0349 Receive supplies from medical logistics	93
M0338 Maintain organizational equipment or supply records	93
M0334 Initiate and document turn-ins of equipment, tools, parts, or supplies	93
M0352 Review budget requirements	93
M0323 Coordinate standard medical supply purchases with medical materiel	86
M0347 Prepare shopping guides	86
M0321 Arrange consignment purchases with vendors, salespersons, or logistics	86
M0333 Identify and report equipment or supply problems	86
M0322 Coordinate equipment purchases with medical materiel	86
M0336 Maintain property custodial action/custodial receipt locator lists (CA/CRLs)	86
M0329 Establish procedures for accountability of equipment, tools, parts, or supplies	86
M0331 Evaluate serviceability of equipment, tools, parts, or supplies	86

TABLE XI

SUPERVISORY AND MANAGEMENT JOB
(ST052)

GROUP SIZE: 61

AVERAGE TICF: 13 YRS

PERCENT OF SAMPLE: 8%

AVERAGE TAFMS: 16 YRS

PREDOMINANT GRADE: E-6/E-7

AVERAGE NUMBER OF TASKS PERFORMED: 122

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING:

TASKS	PERCENT MEMBERS PERFORMING
O0404 Counsel subordinates concerning personal matters	100
O0423 Evaluate personnel for promotion, demotion, reclassification, or special awards	100
O0434 Interpret policies, directives, or procedures for subordinates	100
O0428 Initiate personnel action requests	80
O0396 Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	80
O0399 Conduct supervisory performance feedback sessions	80
O0431 Initiate or maintain call rosters or workcenter pyramid recall rosters	80
O0451 Write correspondence, such as letters, point papers, or staff summary sheets	80
O0457 Write or indorse military performance reports	60
O0414 Develop or implement quality improvement (QI) programs	60
O0458 Write recommendations for awards or decorations	60
O0390 Assign personnel to work areas or duty positions	60
O0433 Inspect personnel for compliance with military standards	60
O0449 Schedule personnel for TDY assignments, leaves, or passes	60
O0456 Write or indorse civilian performance appraisals	60
O0430 Initiate actions required due to substandard performance of personnel	60
O0437 Maintain administrative files	60
O0407 Develop organizational or functional charts	60
O0391 Assign sponsors for newly assigned personnel	60
O0453 Write job or position descriptions	60
O0402 Consult daily assignment sheets	40
O0422 Evaluate personnel for compliance with performance standards	40
O0403 Consult schedule of operations	40
O0443 Participate in QI programs	40

TABLE XII

SUPERINTENDENTS JOB
(ST033)

GROUP SIZE: 5

AVERAGE TICF: 15 YRS

PERCENT OF SAMPLE: 1%

AVERAGE TAFMS: 20 YRS

PREDOMINANT GRADE: E-7

AVERAGE NUMBER OF TASKS PERFORMED: 28

THE FOLLOWING TASKS ARE IN DESCENDING ORDER OF PERCENT MEMBERS
PERFORMING:

TASKS		PERCENT MEMBERS PERFORMING
O0433	Inspect personnel for compliance with military standards	97
O0422	Evaluate personnel for compliance with performance standards	97
O0437	Maintain administrative files	95
O0396	Conduct general meetings, such as staff meetings, briefings, conferences, or workshops	95
O0404	Counsel subordinates concerning personal matters	93
O0434	Interpret policies, directives, or procedures for subordinates	92
O0406	Determine or establish work assignments or priorities	92
O0458	Write recommendations for awards or decorations	92
O0409	Develop or establish work methods or procedures	90
O0419	Establish performance standards for subordinates	90
P0468	Determine training requirements	89
O0457	Write or indorse military performance reports	87
O0423	Evaluate personnel for promotion, demotion, reclassification, or special awards	87
O0410	Develop or establish work schedules	87
O0399	Conduct supervisory performance feedback sessions	87
O0390	Assign personnel to work areas or duty positions	85
O0430	Initiate actions required due to substandard performance of personnel	85
O0401	Initiate supervisory orientations for newly assigned personnel	85
P0461	Brief personnel concerning training programs or matters	84
O0449	Schedule personnel for TDY assignments, leaves, or passes	80
O0402	Consult daily assignment sheets	79
P0467	Counsel trainees on training progress	79
P0476	Evaluate progress of trainees	77
P0478	Maintain training records or files	74